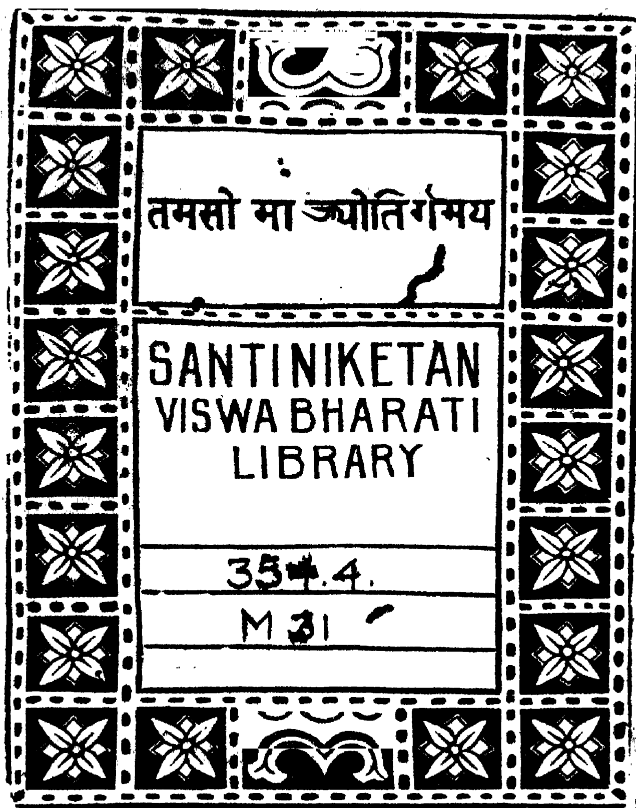

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THE INDIAN RURAL PROBLEM

by

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FOREWORD

This is the first publication of the Indian Society of Agricultural Economics undertaken in pursuance of its new programme of activities adopted by the Executive Committee in June, 1942 and endorsed by the General Annual Meeting at Walchandnagar in December, 1943. A copy of this programme is given at the end of this book. As regards the problem dealt with in this study I need not say anything here as the relevant points are set out in the Authors' Introduction.

It is only necessary to point out that the views herein expressed are the authors' own views, and the Society as such is not committed to them. The Society is open to members from all walks of life and of all shades of opinions. It does not, therefore, as a body, subscribe to any particular views or opinions.

This publication is to be followed by several others which have already been projected. It is hoped to bring out in the near future a volume dealing with the Land Problem of India—the problem which, as the present work seeks to show, is the most vital of all our rural problems. Several scholars and experts have already started working on the problem in their respective regions, and it is our intention to bring these together in one volume so as to present a picture of the conditions all over the country. The volume will be edited by Prof. D. R. Gadgil of the Gokhale Institute of Economics and Political Science, Poona.

The Society has also planned a series of general monographs on the rural life problems of different Provinces and States and we hope to publish at least one of these, which has been almost completed, in the near future. This as well as the other regional studies which will follow have all been planned along the lines of the monographs prepared by the various European Governments prior to the calling of the European Rural Life Conference of 1939.

(Sir) MANILAL B. NANAVATI,
President,
Indian Society of Agricultural Economics.

BOMBAY,
April 1944.

NOTE

(*to the Second Edition*)

The publication of a Second Edition which is *not* revised and enlarged but is just a reprint of the first seems to call for an apology. The decision is deliberate. Since the first edition was published, there have been some developments in regard to some of the problems discussed in this book which we had thought at first of commenting upon. The Government of India as well as some Provincial Governments have published plans for the development of agriculture and the promotion of rural welfare. These deserve a careful appraisal. The purpose of this book, however, has been to set out the fundamentals of the Indian Rural Problem and to indicate the general lines of solution rather than to review specific legislative measures and plans. On a balance of considerations, therefore, we have decided to reissue the book in the present form in view of the persistent demand for it. We would like to add that the reviewers have been very generous in their appreciation of this volume and we have hardly received any critical suggestions for improvements. Some readers have, however, suggested the need for including an index and we have, therefore, given at the end a subject index, an author index and an index of reports cited.

BOMBAY,
May, 1945.

M. B. N.
J. J. A.

INTRODUCTION

It is not difficult to say what the Indian Rural Problem is. At bottom it is none other than that of raising the standard of life of the rural masses. During the last twenty-five years, there has been a considerable growth of industries in India, but this has made hardly any impression on our standard of life, more especially in the rural areas. Industrialism in this country has been an exotic growth, super-imposed upon an unprepared and undeveloped economic structure. Our industrial progress has been slow and lopsided ; the few large-scale industries we have are concentrated in the cities. We have failed to develop the basic and key industries which are the very corner-stone of the industrial edifice in the advanced countries of the world, and the need for developing small-scale and cottage industries has been realised only lately and slowly. As to agriculture, it remains as backward and primitive as ever. The productivity of agriculture has not increased ; in certain respects, it is possible, it has actually decreased. As India lives in her villages, and agriculture is the very backbone of her economic life, we must devote all our efforts to solve the rural problem. The objective is to increase the income of the rural population so as to improve its standards of nutrition, sanitation, housing and education, and this presupposes certain social, political and administrative changes. For one who knows our rural life and its problems, this is no easy task. Agriculture, it has often been said, is not, for our farmers, a business proposition, but a way of life. A way of life cannot be changed by half-measures and piecemeal efforts. It presupposes an all-round, well-planned and co-ordinated effort on the part of the authorities responsible for the well-being of the people.

The root cause of the low productivity of Indian agriculture is our failure to apply modern science to it, but before this could be done, extensive measures for the reform of the land system are necessary. The great economic transformation in European countries during the eighteenth and nineteenth centuries was brought about by the adoption of a new system of crop rotation, better methods of sowing and reaping, the use of chemical manures, and, in general, the application of new scientific knowledge to all the related aspects of the economy. In the process, new economic institutions developed and the entire way of life was altered. In this transformation, the State played a prominent part. Behind what we call the Industrial Revolution, there was not merely a new technique, but also a new spirit, a spirit of innovation, adventure and experiment. A number of factors political and social, conditioned the manner in which and the *tempo*

with which the transformation took place in different countries, but, in essence, the motive force behind it was the same—a desire to go forward, to raise the standard of life so as to turn the economic struggle from one for bare existence into one for a competence and a surplus.

The peculiar circumstances under which industrialism was introduced into this country generated, on the other hand, a spirit of defeatism, and despair among the people. They could not comprehend these "miracles" of science. While the railway and the telegraph brought them face to face with world forces, their technique, outlook and mode of life remained generally unaffected. The old balance between agriculture and industry was destroyed; the villager found his subsidiary industries decaying; there appeared nothing in their place he could take up, no alternative avenues for employment. The result was more and more ruralisation, more and more dependence on agriculture, more and more pressure on the soil. A few cities and towns grew richer, but the rural areas generally sank into greater poverty, from which there seemed to be no escape.

Indian economists, following in the footsteps of Gokhale and Ranade, were not slow to recognise this peculiar character of the economic transition in India. They noted the peculiar difficulties of the Indian problem and tried to point out the absurdity of following in India a policy which may be good enough or just fashionable for England. The policy of the Government of India has been on the whole but little affected by the criticisms or suggestions of our economists. Even the suggestions and recommendations of their own Committees and Commissions have not been fully implemented. The various Famine Commissions of the third quarter of the last century pointed out the seriousness of the agrarian problem, but until about the end of the last war, almost nothing was done either to reorganise agriculture on a new scientific basis or to foster industries, large-scale or small scale, so as to relieve the pressure on the land and to increase the national income. It is true that the Government had a Famine Relief policy and that they developed railways and irrigation which have reduced the severity of famines. Such measures were, however, quite inadequate to the needs of the situation. In 1919, agriculture became a transferred subject, but the limitations of Dyarchy, especially in the field of finance, made any radical improvements impossible. It was in 1926 that the Royal Commission on Agriculture was appointed to review the entire field comprehensively and indicate lines of progress. This Report is a landmark in the evolution of agricultural

policy in India. Its recommendations covered almost every aspect of rural life, and it seemed as though the Government of India had at last decided to take a more active interest in our rural problem. However, several important topics were excluded from the scope of the Commission's enquiry, such as land reforms, irrigation cess, and inter-departmental co-ordination. It was expected that a separate Commission would be appointed later to deal with these aspects, but that was not done. During the two decades thereafter we have advanced negligibly, if at all ; for close on ten years, our agriculture was in the grips of the Great Depression. The popular ministries of 1937 in the Provinces took up the problem in all earnestness and with determination, but the war supervened and found us quite unprepared and unorganised to face its manifold problems. At a time when a country like England with a large food deficit is able to feed its people fairly satisfactorily, we in this country were confronted with a complete debacle. The Government of India hesitated between control, decontrol and partial control ; the various Provinces were unable to evolve a co-ordinated policy in the higher interests of the country. More recently, a more comprehensive policy has been formulated with reference to war-time needs. The Government of India have also appointed a long-term Agricultural Policy Committee to go into problems of post-war reconstruction and development, but this Committee has not met so far. It is evident that so long as the Government of India do not change radically their entire outlook on and policy in respect of our rural problems, no satisfactory solution is possible. If freedom from want is going to be the basis of the new economic order after the war, it is necessary to assure at least a bare minimum to India's teeming millions.

It has often been said that agriculture in India is on a deficit economy. We find on our hands an antiquated land system which leaves to impetus for the tiller of the soil ; we have all the evils of a feudalistic system with one of its redeeming features. There are far too many people on the land ; land holdings are getting smaller and more and more scattered ; the system of agricultural finance through co-operative societies has failed to help the agriculturist substantially ; there is no adequate road system for transport, no proper grading or standardisation of agricultural produce ; land taxation is iniquitous, and no organisation exists to look after our rural problem in all its economic and social aspects. Co-operation has been tried, without much success ; there has been some piecemeal tenancy legislation in respect of a few selected areas. The Agricultural Research Institute

at Pusa, the various Agricultural Colleges, the Imperial Council of Agricultural Research, the Indian Central Cotton Committee and the Central Jute Committee and of late the Agricultural Credit Department of the Reserve Bank of India have undoubtedly been doing some valuable research work. Some of the Indian Universities have courses of instruction in rural economics and their Economics Departments have, even with their meagre resources, done some amount of research work on rural problems. It is, however, symptomatic of our general apathy to this vital problem of rural reconstruction, reform and planning, that hardly any of our Universities has a Chair in Agricultural Economics with specialised staff and adequate equipment. All this contrasts very unfavourably with the work done and being done even in these abnormal times in countries like the U. K. and the U.S.A. A few public bodies and organisations, like the Servants of India Society, the All-India Spinners' Association, the All-India Village Industries Association, the Harijan Sevak Sangh and the Kisan Sabha have done some work in the field, partly of a practical nature and partly of the research type. But, research and new knowledge have not yet fertilised our agriculture or penetrated to the actual farms.

It is not the object of these preliminary remarks to point out what can be done and must be done here and now, but merely to indicate the gravity and urgency of visualising our rural problem as a whole and to make out a *prima facie* case for an active State policy in this regard. There is no better agency for the necessary comprehensive planning than the State, and this, under our conditions, means ultimately the Government of India, for this is truly a matter which concerns the "peace, safety and tranquillity" of the country.

We would also emphasize in this connection that a proper policy on the part of the State must include in it as a basic plank the question of land reform. Unless the system of land tenures and land holdings with the attendant evils of absentee landlordism, sub-infeudation and tenancies, feudal levies and exactions and sub-division and fragmentation of holdings is altered, it is not possible to increase the productivity of the land. Several European countries were faced with similar problems during the ninteenth century, and they tried to reform their land systems by suitable legislative and other measures, thus making famines to a large extent a thing of the past. Most of these countries have favoured the system of peasant proprietorship and have sought to rehabilitate the peasant so as to make him more efficient, more contented and more enlightened. The land systems in

India have had a long evolution ; there are diversities and complexities as between the different parts of the country. The methods of reform will have to take all these into account. But there can hardly be any doubt that so long as the ownership, distribution and utilisation of land are not so planned as to make for economical cultivation, other reforms can hardly help the agriculturist except perhaps in a small way.

For voicing the grievances of our industrialists and businessmen there are Chambers of Commerce and Industry, Millowners' Associations and the like, which make suitable representations to Government from time to time and manage to get a hearing. Our rural masses are truly dumb. Their sufferings may be a fruitful source of sporadic agrarian riots or smouldering discontent, but there is no definite organisation of peasants themselves to mobilise knowledge, create and educate public opinion and lay down policies in the interest of an ordered growth and reconstruction. A rural reform programme must therefore include the promotion of peasants' organisations and the training of leaders from among the villagers.

A word now about the object of this study which is the first publication under the auspices of this Society. The object of this study is to review the Indian Rural Problem in its general aspects, so as to enable us to visualise it as a whole and to sketch out the general lines of the policy which the State must follow. If it is true to say "Industrialise or Perish," it is equally important also to remember that we have to modernise, rehabilitate, revitalise and rebuild our rural economy in harmony with the needs of the economy as a whole.

Indian public opinion now thinks in terms of a country-wide all-embracing planning, but we have not attempted to offer in this book anything like a definite Plan for Agricultural Development. That task requires the co-operation of experts from different fields, and one cannot think of a plan for Agriculture apart from a plan for Industries, Communications, Housing, Electrical and Engineering Development, Education, Social Services, etc. In any case, we hope, we have made in the course of this study a number of suggestions which will be useful to any representative and authoritative body which takes up the task of formulating a proper plan. We should only add here that perhaps the most essential part of any plan is the personnel. However sound a plan may be on paper, it cannot reach fulfilment unless its operation is in charge of the right kind of personnel. For this reason, we have laid ample stress on administrative reform and on the need for revitalising village life through appropriate agencies and institutions. This work can begin and ought to begin right now.

"Full-dress" planning may have to wait till we have a national Government at the Centre but there are many problems in respect of which it is possible for, nay, incumbent on, the present Government of India to take the initiative. Some of the Provincial Governments have already started building up Post-war Reconstruction Funds, and if the Government of India help them with suitable grants-in-aid and technical advice, beginnings in the right direction can be made at an early date.

This volume is divided into three parts. Part I states concisely the facts of the situation. In this part comment is eschewed or reduced to the minimum. Part II reviews the activities of the various Government Departments and public and semi-public bodies, and attempts to assess the adequacy or otherwise of the work so far done. In Part III are set out the essentials of a proper policy, embracing not merely economic but, of necessity, the broader sociological aspects of the rural problem. The approach adopted here is more practical than academic, and the suggestions made are born of the varied personal experience of one of us. There are possibly some important topics which we have left out, but that perhaps is inevitable when we are dealing with a problem so vast and intricate. To be able to do justice to many of these problems, a much more intensive study is necessary than we have undertaken here. The present volume is thus a sort of general introduction to the other more specialised studies planned to be undertaken in course of time by this Society.

Our thanks are due to Professor C. N. Vakil, Director of the University School of Economics and Sociology, University of Bombay for placing at our disposal all the facilities for research available in the institution and for also having lent us, when necessary, the assistance of his research staff. We are also grateful to the Reserve Bank of India for similar help. They have given us ready access to the books and other material available with them. The office staff of this Society has, of course, borne their share of the burden of collecting the necessary data and preparing notes on the various topics dealt with in this volume. They have also done the arduous work of going through the proofs. Mr. B. S. Mavinkurve, who has been with us from the time this work was commenced, has rendered valuable assistance at all stages, and Mr. S. Thotapalli has also not spared himself, though he joined us later, and had other work to attend to. To both these men our cordial thanks are due.

M. B.N.
J. J. A.

PART I

The Facts

CHAPTER I

ENVIRONMENT AND RESOURCES

NATURAL REGIONS

INDIA has often been called a sub-continent by itself. It is thirteen times as large as the British Isles and nearly equal in area to the whole of Europe, excluding Russia. On the North, it is bounded by an extensive land frontier of 4,500 miles half of which is covered by the snow-capped Himalayan and other mountain ranges. Southwards the land, with a coastline of about 4,300 miles, gradually tapers into the Indian Ocean. Within the borders, the country lends itself to three regional divisions. Firstly, there is the triangular peninsula in the South marked from the rest of India by the Vindhya and Satpura ranges. This is an elevated plateau flanked on each side by the coastal ranges—the Western and the Eastern Ghats. Secondly, between this peninsula and the Himalayas is the Indo-Gangetic plain stretching from the valley of the river Indus in the west to that of the river Brahmaputra in the east. Entirely composed of rivers and silt, this forms the most extensive sheet of level cultivation in the world. Lastly, there is the northern region covered by the Himalayan ranges which overlook the Gangetic plain and exercise a dominating influence both on weather and vegetation of the country.

RIVERS

Seven main rivers drain the peninsula while the Indo-Gangetic plain is traversed by two great river systems, one comprising the five western rivers which gave the Punjab its name, and the other of seven eastern rivers including the Ganges and the Jumna. The melting of the snow in summer makes these rivers perennial. The peninsular rivers, on the other hand, which depend for their water supply on rains flow in torrents during monsoon but shrivel up during the hot weather.

CLIMATE

The whole country extends from 8° to 37° north latitude and from 61° to 101° east longitude. The Himalayas bordering on the north are capped in eternal snow ; while, in the south, the land gradually tapers into the warm waters of the Bay of Bengal on one side and of the Arabian Sea on the other. As a result, any extreme climate that is known to the tropics or to the temperate zones may be found in India. But, on the whole, the country's climate may be described as semi-tropical.

Rainfall

By far the greater portion of rainfall in India comes with the south-west monsoon which strikes Ceylon at the end of May and, dividing itself into two branches, passes up the west and east coasts of peninsular India. This summer monsoon, between June and October, accounting for nearly 90 per cent. of the country's total annual rainfall is the chief source of water supply over most of the peninsula and over almost the whole of Northern India. The retreating monsoon brings a heavy rainfall to the south-eastern portion of the peninsula between October and December. The Central Provinces, Berar and Hyderabad, also get some showers during this season which are of great value to the wheat-growing districts in these regions. Though winter is usually without rain in Northern India. the N. W. F. P. and the extreme North-Western districts usually receive some rains during this season.

The rainfall varies as between the different parts of the country. Though the average for the whole country is about 45 inches, it is 100 inches for the major part of the west coast ; the amount diminishes eastward, is below 20 inches on the large part of the centre and east of the peninsula and is only 5 inches in South Madras. Similarly, it is over 100 inches in the North Assam Valley—Cherapunji has nearly 460 inches—but the amount steadily diminishes westward and is only 5 inches in the Indus Valley. Not only are there these variations as between the different parts of the country but within each part of region rainfall varies from year to year. Broadly speaking, India has a cycle of five years in which one year is good, one bad and three are indifferent.

The following table shows the unequal distribution of rainfall as well as the variations from the average since 1911.*

Territory.	Normal rainfall.	Number of years when rains were below normal.			Percentage variation (of the average for deficient years) from the normal.		
	(Inches)	1911-20	1921-30	1931-39	1911-20	1921-30	1930-39
Madras Deccan	24.5	5	6	6	—20.4	—18.9	—10.6
Bombay—							
Konkan	108.6	5	5	3	—20.9	— 6.8	— 9.6
Sind	6.5	6	5	5	—55.4	—49.2	—38.3
United Provinces, West ...	37.5	6	2	5	—21.4	—23.8	—14.3
Punjab Southwest	9.5	5	5	5	—24.2	—12.6	—15.8
Berar	32.3	5	6	1	—28.2	—10.2	—14.2
N. W. F. P.	16.8	5	6	6	—15.5	—14.3	—14.9
Hyderabad, South	30.4	5	7	3	—29.6	—14.8	—13.5
Rajputana, West	11.9	5	6	5	—41.1	—13.4	—18.9
Central India, West	38.4	4	8	4	—27.9	—14.6	—11.7

* Compiled from the Statistical Abstract for British India, 1910-11 to 1919-20; 1920-21 to 1929-30 and 1930-31 to 1939-40: Tables on "Normal and Actual Rainfall according to Chief Political Divisions."

Since rainfall is vital factor in Indian agriculture its failure is always dreaded and it led, until recently, to heavy losses of human lives. The following table gives the number of famines and the estimated mortality from the same during the last century :—

Period.		*Number of famines.*	*Estimated mortality.*
1800-1825	... ...	5	1 *million*
1825-1850	... ...	2	·4 ,,
1850-1875	... ...	6	5 ,,
1875-1900	... ...	18	26 ,,
	Total ...	31	32.4 million

As a result of the development of transport facilities and the more effective organisation of famine relief the toll of human lives by famines has been greatly reduced during the present century. A famine under modern conditions is more a shortage of purchasing power than a scarcity of foodstuffs available. However, famines even now create intense suffering in the areas affected owing to the low sustaining power of the bulk of the cultivators and agricultural labourers. In 1918, for example, there was a famine over a wider area than ever before. Owing to the failure of the monsoon towards the end of 1920 and in the early months of 1921, a famine had to be declared in parts of Madras, Bombay, Central Provinces and Baluchistan. Local distress also prevailed in Bengal, Central India and the Punjab. In 1939, Kathiawar suffered from a serious famine and Rajputana and parts of the Punjab and the adjoining Provinces were also affected. During the current year portions of Bombay Deccan and North Madras and some coastal regions of Bengal suffered heavily owing to famine conditions. There are still areas of chronic famine conditions such as Bijapur, Rajputana, Hisar, etc., totalling about 27 million acres.

Indian agriculture has been called a gamble in rains. In any given year, not only may the rains not arrive but they may arrive too early or too late. Even a year of normal average rainfall may, thus, witness famine conditions because of the untimely commencement or end of the monsoon and the uneven distribution of the rainfall over the season.

SOILS

The Royal Commission on Agriculture classified the soils of India under four broad heads : (i) the alluvial soil, (ii) the black soil, (iii) the red soil and (iv) the laterite soil. The first three soils are deficient in nitrogen, phosphoric acid and humus though they have

enough of potash and lime; the last is deficient in potash, phosphoric acid and lime but humus is present in adequate measure.

The Alluvial Soil is formed of a fine sediment carried down from the mountains by rivers and is very fertile (except for the deficiency of nitrates) as well as light and easily worked. The Indo-Gangetic valley is richly endowed with it, Sind, North Rajputana, the Punjab, the U. P., Bihar, Bengal and Assam being within this alluvial zone of about 300,000 square miles. A belt of this soil also girds the coast of the peninsula. Sugarcane and rice are the main crops of these tracts.

The Black Soil which is suitable for cotton cultivation covers over 200,000 square miles in peninsular India embracing the major portions of Bombay, the whole of Berar, the western parts of Central Provinces, Central India and Hyderabad. Cotton and jowar are the main crops of these regions.

The Red Soil covers almost the whole of the peninsular zone comprising Madras Presidency, Mysore and South East Bombay and extends through the east of Hyderabad and the Central Provinces to Orissa and Chota Nagpur. It is also found to occur in the southern part of Bengal and Central India and the eastern half of Rajaputana The consistency, depth and fertility of the soil differ widely from one region to another. The poor light-coloured soil of the uplands yields only bajra whereas in the rich and bright-red fertile loam of the plains, a variety of excellent crops is produced with the aid of irrigation.

The Laterite Soil which is to be found in Central India, Assam and along the Western and Eastern Ghats is formed by decomposition of the ' laterite ' rocks due to heavy tropical rainfall. Tea thrives best in these tracts, since acidity which this crop requires is a peculiarity of the laterite soil. The plantation districts of South India, Bengal and Assam are to be found in this region. Where the soil consists of heavy loams and clays and can easily retain moisture, good crops of rice are grown.

There has been so far no systematic soil survey of India in spite of the recommendation of the Irrigation Commission of 1901 that such a survey is an essential preliminary to the development of irrigation. The Royal Commission on Agriculture also admitted the importance of a soil survey for India and suggested that the Council of Agricultural Research, when established, should undertake the collection and publication of all the information available in regard to the

composition and characteristics of Indian soils. The Russell Report (1936) recommends that no further irrigation should be undertaken without a proper soil survey.

One of the favourite topics of discussion in this connection has been to what extent soils in India have been deteriorating in respect of fertility. There seems to be a consensus of opinion that as a result of continuous cropping of the land without manuring and without any attempt at treating the soil scientifically we have come to a stage when further deterioration is not likely. In the words of the Royal Commission on Agriculture, "such experimental data as are at our disposal support the view that when land is cropped year by year, and when the crop is removed and no manure added, a stabilised condition is reached. . . . A balance has been established, and no further deterioration is likely to take place under existing conditions of cultivation." The main defect of our soils is nitrogen deficiency. Cattle dung which is a valuable source of manure is used as fuel, while oil-cakes, hides and bones are exported in large quantities. The farmer's prejudices prevent him from utilising nightsoil, fish and certain other forms of manure, while artificial fertilisers imported from abroad are not within his reach. While efforts are thus necessary in the direction of supplying rural areas with cheap alternative fuel and popularising the use of oil-cakes, farmyard manure, composts, nightsoil, fish and bone meal, a study of the nature and constituents of soils in different parts of the country would greatly help the farmer in taking to adequate soil aeration, judicious rotation of crops, cultivation of the necessary legumes and green manures and the use of appropriate fertilisers.

Forest Resources

Nearly 87 million acres or about 13 per cent. of the total area of the country is under forests. The high hills are covered with pine, fir and bamboo forests while lower down grow trees like teak, sal and babul. The major forest produce are timber and firewood while the minor products comprise bamboos, fruits, fibres, raisins, bark, wood pulp, rubber and such other miscellaneous materials. The following figures show the financial results of forest administration as also the outturn from forests in the British territories.

Year.	Outturn of fuel and timber.	Minor produce.	Revenue.	Expenditure.	Surplus.
	Cub. ft. ('000)	Rs. ('000)	Rs. ('000)	Rs. ('000)	Rs. ('000)
1937-38	279,633	1,18,73	2,85,56	2,03,76	81,80
1938-39	284,919	1,22,83	2,79,74	2,09,04	70,70
1939-40	293,656	1,20,89	2,84,50	2,05,83	78,67

In addition to being a source of revenue to the Government forests also contribute to the welfare of the people inasmuch as they render the climate more equable, absorb excess water during heavy rains and thus lessen the severity both of draught and flood. Compared to the size of the country, the area under forest is quite inadequate. There has been a reckless destruction of forests in India in the past which has, over many parts of the country, deprived the peasantry of wood for fuel and for building cottages, exposed agriculture to greater risks of draught, flood and soil erosion, and, on the whole, resulted in sterilization of the soil. The need is therefore felt in almost every province for a well-managed forest conservation and afforestation policy and the creation of village woodlands.

The problem of exploiting the forest resources appears to have been thus far approached from two angles, viz., that of the fiscal value of forests as a source of revenue and that of the conservational value of forests on climatic and physical grounds. The more urgent problems of providing cheap fuel to the villagers and grazing facilities to their cattle as also the necessity of starting forest industries have not as yet been given sufficient consideration. The tropical and semi-tropical forests of India hold out great possibilities for starting subsidiary industries such as manufacture of charcoal, extraction of turpentine, lac-culture, preparation of dyeing and tanning materials, basket, rope and mat-making and such other occupations which, if well organised, would confer material benefits on the rural population.

Mineral Wealth

The following table gives the value of important minerals produced in India including the Indian States in 1938:—

(Value in thousands of rupees.)

Mineral.	*Value.*	*Mineral.*	*Value.*
Coal ...	10,64,24	Manganese ore	4,00,51
Salt ...	95,18	Mica	42,05
Saltpetre	11,68	Monazite	2,84
Gold	3,04,75	Petroleum	1,65,43
Iron ore	48,57	Copper ore and matte	32,41
Chromite	6,88	Magnesite	1,61

The total value of minerals, for which returns were available for the year 1938, was Rs. 34.14 crores.

India has a great store of these minerals. She contributes three-fifths to the world's total mica production and thus heads the list of mica-producing countries. In respect of coal, she has the largest deposits in the whole of the British Empire with the exception of the United Kingdom. Her iron deposits are considered to be one of

the world's major reservoirs. Besides, there are large deposits of silver, diamonds, petroleum, building stones, clays, cement, mineral fertilizers, colours and abrasives, which, if properly exploited, would give India a prominent place in the metallurgical world.

The chief minerals whose absence or inadequacy is seriously felt by the Indian industrialists are lead, zinc, copper, sulphur and petroleum. The concentration of over 72 per cent. of the country's coal deposits in Jharia and Raniganj collieries is also a drawback for industrial advancement in other parts. But looking to the examples set by other countries these limitations appear to be in no way insurmountable. The immediate difficulty, however, is the want of knowledge about the actual mineral wealth of the country. Hitherto, no thorough geological survey of India has been made, excepting for Bihar. It was recently disclosed by Dr. Cyril Fox that only 500,000 square miles have been so far accurately surveyed by the geologists of his department but that a million more square miles still remained to be surveyed. Even the survey that has been carried out is incomplete in so far as the testing of the economic values has not been done for all the minerals. The Utilization Department has been started only recently during the war.

Water Power

Altogether, India's water power resources are considered to be next only to those of Canada and the United States. The potential reserve is estimated to be 27 million kilowatts but only half a million kilowatts have been developed so far. India is thus utilizing less than a fiftieth part of the total power available whereas, the United States, France and Japan have exploited a third, Germany over a half and Switzerland nearly three-fourths of the national water power resources.

The prospects of hydro-electric development in the country are so bright that "India promises to be one of the leading countries of the world in regard to the development of hydro-electric power."* Yet no thorough survey of these resources has yet been made. A complete and authoritative survey is an indispensable pre-requisite to an effective planning and rapid development of electricity for agriculture as well as for large and small scale industries.

Horticulture

The climatic diversity makes it possible to grow almost all kinds of tropical and semi-tropical fruits in the country. In Kashmir,

* Indian Year Book 1940-41, p. 878.

N. W. F. P., and the Punjab can be grown apples, peaches, cherries, and apricots.. The Central Provinces and to some extent Assam, are well known for oranges. In the plains of U.P., Bihar, Bengal, Madras and Bombay, mangoes, pineapples, and bananas can be successfully grown. And yet the area under "fruit and vegetable cultivation" in British India gradually declined from 4.6 million acres in 1920-21 to 3.9 million acres in 1939-40. At the same time the value of imports of fruits and vegetables has risen to nearly a crore of rupees. Obviously, the commercial aspect of fruit growing has received little attention in India.

Recently, the Indian Farming published some articles on economics of fruit growing which indicate the profitability of the industry in India. In respect of peach growing in the N.W.F.P. it has been found that a six-year-old orchard with 27.45 per cent. 'orchard efficiency' could bring a profit of Rs. 92-7 per acre and that, if the efficiency is raised to 100 per cent. by intensive effort and efficient management, the profits could be increased to more than three times the above figure.* Banana growing in Baroda has produced a gross income of Rs. 750 per bigha (3/5 acre) which, after deducting the cost of cultivation, leaves a net profit of Rs. 320 a bigha or more than Rs. 530 per acre. The yield of grapes per acre in India is at least as much as, if not more than, in other grape-growing countries in the world. Investigations into the theory and practice of horticulture are necessary for the development of the industry. The main obstacles to this development are absence of careful picking and packing and cold-storage facilities, want of cheap, rapid and reliable means of transport, and lack of establishments for preserving by jam-making, bottling and canning the surplus fruit crop. It is hoped that the All-India Society of Horticultural Workers formed in January, 1942, will organise efforts and create facilities for the development of this industry, which, as in the case of dairy industry, is necessary to bring about the highly desired balance in the national diet, to diversify employment and to supplement the income from small holding.

Cattle Wealth

The number of cattle in India (including Burma) as shown in the Census of 1935, is about 215 million which is nearly one-third of the world's total bovine population. The density of cattle per 100 acres of sown area is as high as 67 in India as against 25 in

* *Indian Farming*, April 1942, pp. 188-92.

Egypt, 15 in China and 6 in Japan. More than half of this cattle wealth, however, is lost to the country owing to inferior quality of the animals. Inadequacy of grazing facilities, the Hindu religious sentiment against slaughter even of worthless cattle and absence of selective breeding on any noticeable scale have been perpetuating the poor species and rendering an increasing number of them uneconomic as aids to production. The proportion of cows which yield no milk or are not milked at all is, on conservative basis, between 60 and 70 per cent.*; such cows are merely a drag on the country's resources. Equally unsatisfactory is the condition of the cattle as draught animals for the plough or the cart. The economic minimum which a pair of bullocks working eight hours a day should cultivate has been estimated to be ¾ to 1 acre ; but a survey in the Sitapur district (Oudh) showed that 87 per cent. of the bullocks could cultivate hardly half an acre a day.†

Despite this unsatisfactory condition, the livestock products occupy, according to Dr. Wright, an important place in India's economy. This is shown by the following figures given in his report.‡

	Annual value (Rs. in crores)
Milk and milk products ...	300
Hides and skins ...	40
Cattle labour ...	400
Manure ...	270
	1,010

The industry is thus estimated to contribute 50 per cent. to the country's total agricultural income. These figures also indicate its potential value to the nation and the contribution it would make to the farmer's income if the productive value of cattle were increased by the use of scientific methods of animal husbandry. At present, the average milk yield of the Indian cow stands very low—a little over 600 lbs. per year against over 5,400 lbs. of the British cattle. But experience on military dairy farms has shown that it is possible to create herds in India with average milk yield of 5,000 to 6,000 lbs. The lactation yield of the Ferozepur herd has shown an average of 7,000 lbs. Out of 290 lactations recorded 30 exceeded 8,000 lbs., 16 exceeded 9,000 lbs., and 6 exceeded 10,000 lbs.

* Dr. V. K. R. V. Rao: "India's National Income", 1931-32, p. 88.

† Dr. R. K. Mukerjee: "Food Planning for Four Hundred Millions," pp. 134-5.

‡ Dr. N. C. Wright: "Report on the Development of the Cattle and Dairy Industries of India, 1937," p. 61. We are not concerned here with the accuracy or ortherwise of the figures given above, but only with the general conclusion that emerges from them.

The cattle population in India has been rightly described as "the largest, the most dense per acre of cultivated area and per person and probably one of the least efficient in the world."* "Fewer but fitter animals" would, therefore be the proper objective of any policy for improvement of our cattle. This objective will be reached only when we eliminate the "scrub" cattle, raise the quality of the rest by selective breeding and keep them well-fed by providing adequate facilities for grazing.

Fisheries

Before we conclude this section, a word may be said finally regarding our fishery resources.

The rivers of India and the tropical seas around are an invaluable source of a variety of rich edible fishes. The seas abound in special species of mullet and pomfret, seer, hilsa, mackerel and whiting, while, inland, the waters teem with varieties of fresh-water fish of which the rohu, the catla and the mrigal are well known. Even the creeks and hillstreams have fair supplies of fish such as mullet, perch and trout. Fish is the easiest and cheapest source of proteins and valuable mineral substances, and hence the exploitation of these resources should materially raise the standard of the people's diet which at present is highly deficient in necessary proteinous foodstuffs. While potentialities of development of fisheries in India are vast, the industry remains in the hands of an illiterate, poor and unorganised section of the people with little practical assistance from the State or the enlightened community at large. "As in Japan, it appears that the general conditions of the industry are such that the initiative must be necessarily taken by Government in the uplift and education of the fishing community and the introduction and testing of raw and improved apparatus and methods."†

CHAPTER II

POPULATION

Growth and Density

According to the Census Reports, the population of India (excluding Burma) increased from 204 millions in 1872 to 388.8 millions in 1941. About 59 million of this increase, however, is due to the

* Duckham: "Animal Husbandry in the British Empire," p. 200.
† Indian Year Book, 1942-48, p. 606.

inclusion of the new areas and improvement in the method of enumeration. The table below gives the actual population and density in the major Provinces and States in 1881 and 1941:—

—	Population. ('000,000)		Density per square mile.	
	1881	1941	1881	1941
Provinces (excluding Burma) ...	**195.4**	**295.8**	**229**	**342**
Assam	4.8	10.2	87	186
Bengal	36.3	60.3	469	708
Bihar and Orissa	30.9	45.1	373	442
Bombay	14.1	20.8	182	272
C. P. and Berar	11.9	16.8	120	170
Madras	30.8	49.3	217	391
N. W. F. P.	1.6	3.3	117	213
Punjab	16.9	28.4	171	287
U. P.	43.8	55.0	412	518
States	**55.4**	**93.2**	**91**	**130**
Baroda	2.2	2.9	267	345
Gwalior	3.1*	4.0	117*	154
Hyderabad	9.8	16.3	119	198
Jammu and Kashmir ...	2.9*	4.0	36*	49
Cochin	.6	1.4	406	953
Travancore	2.4	6.1	315	792
Mysore	4.2	7.3	143	249
India	**250.2**	**388.9**	**163**	**215**

*These figures relate to 1901.

The variations in the growth as also in the density of population from one area to another are due to numerous factors, the most important being the conditions of rain-fall, irrigational facilities, configuration of land and development of resources. By roughly dividing the country into four "natural" regions each of more or less uniform agricultural conditions, it is possible to see the influence of the development of natural resources on the growth of population.†

Group.	*Regions.*	*Percentage increase during* 1881-1931 *in the Regions.*
I.	(1) Cochin, (2) Travancore, (3) East Bengal, (4) Chota Nagpur Plateau, (5) Sind, (6) North West Punjab and (7) Brahmaputra Velley	60 and above.
II.	(1) East Coast Madras, North, (2) East Coast Madras, South, (3) Bombay Deccan and (4) Surma Valley	20 to 45.
III.	(1) Gujerat, (2) Orissa, (3) West Bengal, (4) North Bihar and (5) Sub-Himalayan Punjab	10 to 16.
IV.	(1) East, West and Central Indo-Gangetic Plain, (2) Central India Plateau, (3) South Bihar, (4) West Bengal and (5) Konkan (excluding Bombay City)	10 and below.

The rapid increase in population in the regions in Group I was facilitated by the construction of extensive canal irrigation works in Sind and the Punjab, growth of plantations in the Brahmaputra Valley, Cochin and Travancore, mining and industrial development in some of the regions and occupation of waste lands. Excepting Sind and Chota Nagpur Plateau, the growth in all the regions in this Group is more than 100 per cent. These very causes have made possible the growth of population in the regions in Group II, but

† N. V. Sovani: "The Population Problem in India; A Regional Approach," Chapter IV.

some of these being comparatively older among the settled regions, the scope for fresh developments was less and the increase in the population was correspondingly smaller. Most of the regions in Group III and all the regions in Group IV are old centres of civilisation in India and have been densely populated from historical times. Hence, despite the industrial progress and some development of canal works and well irrigation in many of these regions the increase of the population has been slow. Migration of population, vagaries of the monsoon, frequent famines and epidemics are other contributing factors.

No less significant than the increase of population is its highly uneven distribution. The last three columns together, in the table below, show that nearly three-fifths of the population of the country is crowded in one-fifth of the area.*

Area (%)	57.7	22.1	8.3	5.5	6.4
Population (%)	17.5	23.4	15.3	14.3	29.5
Density	under 150	150—300	300—450	450—600	600 and over.

The above figures also show that while at one extreme, 57 per cent. of the area supports only 17.5 per cent. of the population with a density of below 150 per square mile, at the other end, 30 per cent. of the people are crowded in 6.4 per cent. of the area with a density of 600 and more. Assuming that the desirable limit of average density for an agricultural country like India is 250, it will be seen from the last three columns that *at least* 59 per cent. of the population by concentrating itself on 19 per cent. of the area has exceeded this limit. —about 30 per cent. of the people having out-stripped the limit more than twofold.

It is noteworthy that, in spite of industrial development, urbanisation has made little progress. The proportion of rural population to total population is still as high as 87 per cent. in India as against 46 per cent. in Canada, 49 per cent. in Northern Ireland, and 51 per cent. in France.

(Figures in millions.)

——	1881	1921	1931	1941	Variation in period 1881 to 1941.
Total population	250.2	305.5	338.2	388.8	+ 138.6
Urban	23.0	31.3	37.5	49.6	+ 26.6
Rural	227.2	274.2	300.7	339.2	+ 112.0

* Dr. Gyan Chand: "India's Teeming Millions," pp. 90-91.

Occupational Distribution

Let us now consider the occupational distribution of the people. Exact conclusions relating to changes in the occupational distribution of the population are hard to draw owing to lack of uniformity in the basis of classification adopted at the various censuses. However, the available figures for 1901 and 1931 are given below to show the increase or decrease under the principal occupational sub-heads.

Occupational sub-head.	Percentage of total workers.			Percentage increase + or decrease — since 1911
	1911	1921	1931	
1. Pasture and Agriculture ...	70.82	71.67	66.57	—6.0
2. Fishing and Hunting	.51	.50	.54	+6.0
3. Mining	0.51	0.24	0.23	+9.5
4. Industry	11.76	10.75	9.97	—15.2
5. Transport	1.60	1.84	1.53	—4.4
6. Trade	5.44	5.50	5.15	—5.3
7. Public Administration and liberal arts	2.89	2.83	2.69	—6.9
8. Miscellaneous	6.77	7.17	13.32	+96.8

Despite these limitations, the data are conclusive enough to show a persistent tendency towards increased dependence on agriculture —the number of persons occupied under this group having increased from 91 millions in 1901 to 105 millions in 1921. The 1931 Census, however, placed the figure lower at 103 millions. This decline is not real inasmuch as it is the result of a change in classification. As the Census Commissioner puts it : " It should be made clear at the outset that the decrease in Class A (Production of Raw Materials) caused undoubtedly by the decrease in sub-class I (Exploitation of Animals and Vegetation) is rather apparent than real. The change is due to the number of females, who have returned their occupation as domestic service. In 1921, these would have appeared as workers—mainly if not entirely agricultural—in the occupation in which they assisted the male members of their families."* It is because of this transference of the bulk of agricultural female labourers that the miscellaneous group (8) shows an increase of nearly 97 per cent. within a decade. It this fact is taken into account, the dependence of the population on agriculture would show a steady increase from 61.1 per cent. in 1891 to 71 per cent. in 1911 and 73 per cent. in 1931.

Pressure on Land

Many economic forces such as the steady increase in population, the decay of indigenous industries, lack of other avenues of employment and the rise in land values have been responsible for this increasing pressure on land. Available statistics show that most of the

* Census Report, 1931, Part I, Volume I, p. 281.

rural workers from occupational castes who have been compelled to abandon their traditional occupation have now taken to cultivation.

Caste, tribe or race.	Traditional occupation.	Total number of workers in the caste, tribe or race.	Workers engaged in traditional occupation.	Workers engaged in exploitation of animals and vegetation.	Percentage of	
					(4) to (3)	(5) to (3)
(1)	(2)	(3)	(4)	(5)	(6)	
A. 1. Chamar ...	1. Skinners and tanners ...					
2. Nai	2. Barbers ...	6,710,365	1,199,732	4,028,941	17.8	60.0
3. Bhangi ...	3. Scavengers ...					
B. 1. Khatik ...	1. Pig Breeders ...					
2. Gujar ...	2. Herdsmen ...	1,599,436	674,853	1,141,698	25.9	43.9
3. Teli, etc. ...	3. Oil Pressers ...					
C. 1. Pinjara ...	1. Cotton carders ...					
2. Darzi	2. Tailors ...	2,827,147	959,194	1,110,094	33.9	39.2
3. Momin, etc.	3. Weavers ...					
4. Dhobi ...	4. Washermen ...					
D. 1. Kumbar ...	1. Potters ...					
2. Od, etc. ...	2. Earth workers ...	1,045,920	392,362	400,278	37.5	38.0
E. 1. Barhai ...	1. Carpenters ...					
2. Lohar ...	2. Blacksmiths ...	1,797,697	772,985	416,496	42.9	23.1
3. Sonar ...	3. Goldsmiths ...					
Total, including other non-cultivating castes ...	......	16,650,410	4,487,538	8,043,375	26.9	47.1

This statement is based on Table XI "Occupation of Selected Castes," pp. 414-419, Census of India, 1931, Vol. I, Part II.

It is thus found that in 1931 only 27 per cent. of the workers were engaged in their traditional non-agricultural occupation and that about 64 per cent. of those who had given it up had taken to agriculture and allied pursuits.

Agricultural Labour

This increasing pressure of population on the soil and the growing indebtedness of the agricultural classes due to a combination of factors led to the emergence of a class of landless labourers. This is seen in the speedy growth of this " floating " population from 18.7 million in 1891 to 33 million in 1931. Between 1911 and 1931, the number of labourers per 1,000 cultivators rose from 254 to 417. In some parts of the country the proportion was even higher as it varied with the size of the depressed classes in the locality.

The agricultural labourers may be classified into three groups : field labourers, ordinary labourers and skilled labourers. The field labourers who comprise ploughmen, reapers, sowers, weeders and transplanters represent labour of a seasonal character. The ordinary labourers are engaged on such work as embankment, well-digging, canal-silt clearing and for such other purposes. The skilled labourers include the carpenters, masons, blacksmiths, and leather workers and such other artisans who, though not exclusively agricultural workers, are engaged for important purposes by the farmer and the wages paid

to them are governed by those paid to the agricultural labourers in the village. The remuneration is generally in kind, and is paid out of the crop, though payment in cash, partly or wholly, is slowly coming into vogue.

Regional inquiries have shown that the agricultural labourer is not only unemployed over a considerable part of the year but the wages paid even during the period of employment are very low. Generally speaking, the daily wages may be said to range from 3 to 6 annas a day for men, 2 to 4 annas for women and 1½ annas to 2 annas for children. Permanent employment and fixed wages in kind or cash at an annual rate or for the season are found only on bigger farms and estates in which case, the wages might vary from Rs. 60 to Rs. 100 a year. Very often the wage level is depressed by the petty-holders in the village who are too willing to work for wages so as to supplement their meagre income from the land. It is, therefore, not surprising that in some villages, the wages of agricultural labourers are still as low as they were in 1916. According to Mr. Thirumalai, the landless labourer in the village he surveyed, got " only two-thirds of the income necessary for subsistence even on a low standard."* Broadly speaking, conditions in other parts of India are in no way better. With such a low standard of living the efficiency of the Indian agricultural labourer is bound to suffer considerably in comparison with that of the agricultural labourer in the West.

Not only is the labourer's earning power very low but in some parts of India his extreme indebtedness has driven him to work as a serf-labourer in the field of his creditor. These labourers offer themselves and their families to work in return for a debt they owe and which they can repay in no other way. The Kamias of Bihar and Orissa, the Pannaiyals of Madras, the Pulayas of Malabar and the Halis of Gujerat are some well-known instances. As for the redemption of such workers, the words of the Agricultural Commission itself may be quoted for illustration. "Kamias are bound servants of their masters ; in return for a loan received, they bind themselves to perform whatever menial services are required of them in lieu of the interest due on the loan . . . The Kamia never sees any money, unless it be the occasional few pice he may earn in his spare time. Consequently, he has no chance of ever repaying the principal of his debt and becoming a free man again. A Kamiauti bond, therefore, involves a life sentence."

* Thomas and Ramakrishnan: "Some South Indian Villages—A Re-survey," pp. 40-42.

Agricultural Strata

As a result of the various socio-economic changes in this country during the last one hundred and fifty years, the farming community is no longer a homogeneous class of people with a definite general standard of efficiency. Among the agricultural classes to-day we find men belonging to all castes and sub-castes—Brahmins, Kshatriyas, Vaishyas and Sudras including the lowest untouchables. On the one hand there are men from the higher castes who, like the Brahmins, have acquired land at little or no cost for their religious services or, like the moneylenders, have become owners of lands by dispossessing the ryot. With these classes, agriculture is only a side occupation. Their caste attitudes prevent them from driving the plough or taking an active part in cultivation. They, therefore, employ hired labour, which is cheap and inefficient, to cultivate the lands on crop-sharing basis or give the lands on lease. A similar tendency is noticeable also among the genuine cultivators such as the Patidars of Charotar. Not unoften, even a kunbi would cease to be a cultivator and rent his hands to a tenant, his ambition being to educate his sons and to qualify them for non-manual occupations such as Government service or trade. Such land-holders are interested not in agricultural development but in getting the maximum possible rent from their tenants. They squander their income on expensive caste customs and usages instead of investing in land improvement and thus, to an extent, have a demoralising influence on the lower castes who are not slow to imitate the social habits of the higher classes.

At the other extreme we find the 25 million aboriginals, who largely depend on agriculture, forestry and hunting. They still carry on their occupations in the primitive manner, fighting against several odds such as their own ignorance and poverty and, not the least of all, the deprivation of their rights over the forests and the forest-lands since the establishment of the Forest Department. "Forbidden to hunt and cultivate in the forest, exploited in the villages, they have become servile, obseqnious, timid and of poor physique."* An increasing number of them are thus being driven to the borders of the developed plains where they eke out a living as agricultural labourers.

In between these two extreme types of agriculturists we find smaller peasants and the lower classes of cultivators under tenancy or even sub-tenancy. These sub-tenants "are obviously rolling stones, paying high rents as tenants-at-will and having no fixity of tenure

* Verrier Elwin: "The Aboriginals," p. 2.

or adequate rights enjoyed by other class of tenants."* The low class cultivators possess the least equipment of livestock and implement, have small holdings and pay high rents and rates of interest. Most of them are agricultural labourers under pressure of circumstances and have not the adequate knowledge of efficient methods of cultivation.

Agricultural Efficiency

All these various factors have affected adversely the efficiency of our agriculture. In 1889, Dr. Voelcker, Consulting Chemist to the Royal Agricultural Society, while reporting on the agricultural practice in India, paid a high tribute to the careful husbandry "combined with hard labour, perseverance and fertility of resource" of the Indian agriculturist. But as lands have been passing from the cultivating to the non-cultivating (higher) classes and as increasing numbers who are thrown out of their traditional occupation by forces beyond their control are swarming into the agricultural profession, the average efficiency of the Indian farmer has greatly deteriorated and such laudatory remarks as made by Dr. Voelcker now appear as mere historical reflections. In general, the low class agriculturists suffer from a number of drawbacks and cultivate lands under landlords who are more or less feudally inclined. The following table based on Dr. Nehru's survey of villages in the Ganges Valley throws some light on the situation.*

—	Average rent per *bigha*.	Indebtedness per head.	Percentage of usurious debt to indebtedness.
	Rs.	Rs.	
Brahmin (High caste)	6	40—50	1
Aher (Middle caste) ...	11	10—20	67
Chamar (Low caste)	18	0—10	90

It may be seen how the lower castes have to pay higher rents because of their low social status and solvency while the indebtedness, of the higher castes, which is mostly on account of unproductive expenditure, is comparatively far greater. But considering the terms at which credit is available, the lower castes have to pay higher rates of interest as is reflected by the higher percentages of their usurious debts.

The following caste-wise classification of Khatedars in the Baroda State during 1939-40 illustrates how comparatively less efficient classes have taken to agriculture.†

* S. S. Nehru: "Caste and Credit in Rural India," pp. 54, 92 and 111.
† The Annual Administration Report of the Revenue Department, Baroda State, 1940-41, p. 3.

	Caste.	Number.	Percentage.
1.	Kunbi (including Anjanas)	1,25,857	35·1
2.	Koli	32,209	9·0
3.	Brahmin	28,371	7·9
4.	Thakarda	26,670	7·4
5.	Muslims	20,180	5·6
6.	Baria	19,305	5·4
7.	Raniparaj	14,915	4·2
8.	Rajput	13,456	3·8
9.	Other castes	77,285	21·6
	Total ...	3,58,248	100·0

Kunbis who are a genuine cultivating class are only 35 per cent. "Other castes" under which are grouped Darzis, Luhars, Dhobis and such other professional castes account for roughly 22 per cent. The remaining 43 per cent. comprise Brahmins who do not take any active part in cultivation; degenerate Rajputs (Thakarda and Baria); Sudra labourers (Kolis); converts from other castes (Muslims) and aborigines (Raniparaj). Thus nearly 65 per cent. of Khatedars may be said to keep down, in one way or another, the efficiency of cultivation. Similar conditions prevail in the whole of Gujarat.

It cannot, therefore, be denied that the influx of persons from all castes into agriculture has had unhealthy effects on the country's economy. It is possible to hold that to-day nearly 70 per cent. of those employed in agriculture are "uneconomic" cultivators. In the past, with the help of the caste system, labour in the villages was sub-divided, specialised and standardised. Thus maximum efficiency of every worker in his calling was assured and definite relation between a caste, its labour value and economic efficiency was established. It is now therefore found that a large majority of those who are forced by circumstances to take to land have neither the adequate equipment, knowledge nor training to pursue their occupation profitably.

INCOME

Land which supports nearly three-fourths of the population is the foundation of India's national wealth. The efficiency or otherwise of those who exploit it must therefore leave its impress on the economic condition of the people as a whole. According to Dr. Rao, agriculture, despite its predominance in the country's occupational distribution, contributes only Rs. 6,000 million or 38 per cent. whereas industry in which only 15 per cent. of the total workers are engaged contributes Rs. 3,000 million or 19 per cent. to India's national income; even incomes from services (including Trade, Transport, Government and Domestic) in which 13 per cent. of the total workers are employed

amount to Rs. 4,000 million or 23 per cent. of the total income. The result is that the incomes per worker in services is Rs. 307; in industry Rs. 195 and in agriculture Rs. 133.*

This low income from agriculture is the major symptom of India's general poverty.. The *per capita* income of India has been estimated at Rs. 62 with a margin of error of $\pm$6 per cent. Not only is the income low but its distribution also is highly uneven. The condition of the majority is, therefore, much worse than is indicated by the above figure of *per capita* income. Among the urban classes, for instance, nearly 50 per cent. of the total income is concentrated in the hands of only 10 per cent. of their number ; and if we take the comparatively well-to-do class composed of those whose income exceeds Rs. 2,000 a year, we find that a little more than 1 per cent. are in possession of as much as 10 per cent. of their total income. Inequality between rural and urban income is still more glaring.†

	Income per worker.	*Income per capita*
	Rs.	Rs.
Urban	426	162
Rural	185	48

We have no figures showing our *per capita* income over a series of years on the basis of which we could draw conclusions regarding the progress, if any, that has been achieved. It is doubtless, however, that relatively to other countries as well as in terms of absolute necessities of civilised life, our national income is much too low and an improvement in the productivity of agriculture is the first essential step towards a bettering of the general position.

Health and Efficiency

The close relationship between *per capita* income and public health is too obvious to need explanation. The following vital statistics show the comparative position of India in respect of birth and death rates and longevity of the people.

—	Birth rate per mille.	Death rate per mille.			Mean expectation of life.
		Infantile.	Maternal.	General.	
U. S. A.	17·0	54	8·5	11·2	62
U. K.	14·9	58	4·0	12·4	63
India	48·0	162	24·5	33·0	27

* Dr. V. K. R. V. Rao: "The National Income of British India, 1931-32," pp. 187-9.
† Dr. V. K. R. V. Rao, *op. cit.*, pp. 189-190.

At the back of this poor physical condition of the people is their low purchasing power and the two react upon each other to a marked degree in India. As a result of under-nourishment and inadequate medical aid, nearly 65 per cent. of the persons born die before they reach the age of thirty, about 45 per cent. having been cut off even before their tenth year. The expectation of life in India is the lowest when compared with that in other civilised countries. The four famines which, during the last quarter of the nineteenth century, were responsible for 26 million deaths and the epidemics such as cholera, influenza, plague and malaria which during the first three decades of the present century took a toll of 68 million lives are a proof of the low vitality and poor resistance capacity of the people to disease and death. Even to-day, malaria by its direct and indirect effects causes annually two million deaths and tuberculosis, which is steadily increasing its number of victims, accounts for another half a million every year.

This is deplorable, not only because there is wastage of life much of which could be prevented, but because it incapacitates many others for work and reduces their economic efficiency. Thus we have, on authority,* the facts that in India the number of deaths annually resulting from preventible disease is about 5 to 6 millions ; that the average number of days lost to labour by each person in India, from preventible disease, is not less than a fortnight to 3 weeks in a year ; that the percentage loss of efficiency of the average person in India from preventible malnutrition and disease is not less than 20 per cent. ; that the percentage of infants born in India who reach a wage-earning age is about 50, whereas it is quite possible to raise this percentage to 80 to 90 ; and that hook-worm disease, kala-azar and diseases arising from diet deficiency insidiously reduce the labour power of the cultivating classes. The wastage of life and efficiency which results from these preventible diseases costs India several hundreds of crores of rupees each year. Malaria alone, for instance, is calculated to entail an economic loss of Rs. 10.60 crores annually on account of the diminished earning capacity of the workers. A public health policy to release the large areas of the country which are at present gripped in the strangle-hold of disease would therefore materially help to raise the economic condition of the people.

* All-India Conference of Medical Research Workers, 1924 and 1926 *Cf.* also Report of the Royal Commission on Agriculture, pp. 479-82.

CHAPTER III

AGRICULTURE

EXTENT

THE following table brings out the proportion of sown area to total area in British India and Indian States and indicates the possibilities of extension of cultivation.

(In millions of

—	Total area	Forests.	Not available for cultivation.	Cultivable waste.	Current fallows.	Net area sown.	Percentage of sown area to total area.
British India ...	511	68	89	97	47	210	41
States ...	147	19	28	19	13	68	47

The area classified as "cultivable waste" is 116 million acres or nearly one-fifth of the total area of the country, the proportion of such lands available for cultivation being as high as 26 per cent. in Sind, 33 per cent. in N.W.F. Province, and 44 per cent. in Assam. In each of the remaining Provinces excepting Bombay, the cultivable waste is more than 10 per cent. of the total area. Further extension of cultivation is possible only by bringing such lands and current fallows under the plough. The former requires State initiative and support for land reclamation, control of malaria and other measures to induce people to settle on such lands ; the latter is a question mainly of adopting a suitable system of rotation of crops.

CROPS : FOOD CROPS AND NON-FOOD CROPS

The relative importance of the main crops in Indian agriculture is shown by the figures given in Table A opposite.

Food crops including fruits, vegetables, spices, etc., cover nearly 79 per cent. of the total sown area in India as a whole and are primarily grown for consumption within the country. Non-food crops include some of the principal crops grown partly for export such as cotton and other fibres and oilseeds. It may be noted here that despite the decline in the *per capita* sown area owing to a relatively faster rate of growth in population, the *per capita* area under non-food

TABLE A

—	British India: Million* acres.	British India: Percentage to total sown area.	States: Million* acres.	States: Percentage to total sown area.
Total Food Crops	197·5	80·7	52·0	72·9
Rice	70·1	28·6	4·0	5·6
Wheat	26·1	10·7	7·5	10·6
Jowar	21·7	8·9	13·9	19·6
Bajra	13·4	5·4	6·2	8·7
Gram	11·7	4·8	5·4	7·6
Sugar	3·6	1·5	0·3	0·5
Fruits, Vegetables, spices, etc. ...	6·8	2·8	2·7	3·9
Total Non-Food Crops ...	47·1	19·3	19·4	27·1
Cotton	13·3	5·5	7·5	10·6
Jute	3·1	1·3	0·1	0·1
Oilseeds	16·3	6·6	7·9	11·1
Dyes and Tanning materials ...	0·5	0·2	......	......
Drugs and Narcotics	2·2	0·9	0·4	0·6
Fodder Crops	10·5	4·3	2·4	3·4

*Including area sown more than once.

crops has increased and has, consequently, materially reduced the acreage under food crops per head as is shown below† :

—	Acres per head of population (British India): 1913-14 to 1917-18.	Acres per head of population (British India): 1928-29 to 1932-33.
Net area sown, acres per head	0·918	0·841
Acres under food crops per head	0·873	0·785
Acres under non-food crops per head	0·045	0·057
Population : Millions	245·3	271·5

Rice is the major cereal among the grains and is the chief article of diet of the inhabitants of Bengal, Assam, Bihar, Orissa and Madras. It is particularly in these provinces that the health of the population will be found comparatively poor. Wheat, the nutritive value of which is higher than that of rice, has a restricted consumption owing to its high price and forms a part of the usual diet of the people in two Provinces, the United Provinces and the Punjab, and their adjoining tracts. Other cereals such as bajra and jowar are comparatively coarse, inferior and cheap. Recent increase in the output of food crops has, in fact, been under these less nutritive cereals. Between 1910 and 1938, the production of bajra went up by 25 per cent., that of barley by 57 per cent., of jowar by 110 per cent. while rice during the same period, registered an increase of only 3.5 per cent. and wheat 4.2 per cent. In fact till 1930 the production of

† Sir John Russell: "Report on the Work of the Imperial Council of Agricultural Research in applying Science to Crop Production in India," pp. 15-21.

wheat steadily declined and was 7 per cent. lower in that year as compared with the output in 1910. Foodstuffs which contain an assured supply of proteins are fruits, vegetables, milk, eggs and meat, whose consumption is necessary for an adequate intake of protective foodstuffs. But little has been done in India to develop the sources of these foodstuffs so as to bring them within the reach of the masses. The area under fruits and vegetables is hardly 5 million acres or 1.6 per cent. of the total sown area and the average consumption of milk per head is as low as 7 oz. a day as compared with 35 oz. in Holland, 40 oz. in Denmark, 43 oz. in Norway and 56 oz. in New Zealand.* While meat is comparatively expensive, the sources of other foods of animal origin such as fish and eggs remain unexploited. Fishing and fish trade are still backward while poultry farming has made little advance. Thus, what India needs is not merely an increase in the quantity of food produced but also an improvement in quality and a greater attention to sources hitherto not developed. How this greater and more varied supply can actually be made available to the people who at present cannot simply afford to pay for them is a question of raising their purchasing power which, in turn, is the very core of our economic problem.

Low Yield and its Causes

The average yields of Indian crops are very low as compared with those of other countries.†

(lbs. per acre.)

—	Wheat.	Rice.	Maize.	Sugarcane.	Cotton.	Tobacco.
Egypt	1,918	2,998	1,891	70,302	535	......
Germany	2,017	......	2,828	......	......	2,127
Italy	1,888	4,568	2,079	......	170	1,189
Japan	1,713	3,444	1,392	47,584	196	1,665
U. S. A.	812	2,185	1,579	43,270	268	882
Java	......	......	......	113,570	......	......
China	989	2,483	1,284	......	204	1,288
India	660	1,240	808	34,944	89	987

The average yield per acre in India is one-third of that in Egypt and one-fifth of that in Holland and Denmark in respect of wheat; nearly one-fourth of that in Italy in respect of rice; one-third of that in Switzerland and New Zealand in respect of maize; less than one-third of that in Java in respect of sugarcane and less than one-fifth of that in Egypt in respect of cotton. The economic loss on account of this low yield in respect of wheat alone is well explained by Sir

* Dr. N. C. Wright, "Report on the Dairying Industry of India," p. 155.

† "Statistical Year Book of the League of Nations, 1933-34," Tables 19-47.

MacDougall* in his note to the Central Banking Inquiry Committee. "If the output per acre in terms of wheat were raised to that of France, the wealth of the country would be raised by £669,000,000 a year. If the output were in terms of English production, it would be raised by £1,000,000,000 . . . In terms of Danish wheat production, the increased wealth to India would be £1,500,000,000 per year."

The yield is not only low but also shows wide variations from province to province.†

(lbs. per acre)

—	Rice.	Wheat.	Sugarcane (raw sugar)	Cotton.
Bengal	652	451	3,600	148
Bihar	519	828	2,280	80
Bombay	912	385	5,782	80
C. P. and Berar	419	397	3,394	101
Coorg	1,622	......	......	......
Madras	1,074	......	6,706	88
Orissa	605	728	4,352	50
Punjab	709	757	1,918	182
Average for British India	684	685	2,767	118

Though some variation in the average yield in different parts of the country is bound to occur owing to differences in fertility of soil, rainfall, etc., such wide disparities—as between Coorg (1,622 lbs.) and C. P. and Berar (419 lbs.) in respect of rice, between Bihar (828 lbs.) and Bombay (385 lbs.) in respect of wheat, between Madras (6,706 lbs.) and the Punjab (1,198 lbs.) in respect of sugar-cane and between the Punjab (182 lbs.) and Orissa (50 lbs.) in respect of cotton—must be, to a large extent, due to a relatively low standard of cultivation in the backward areas. The causes of this situation are manifold : (i) deterioration of soils, (ii) inadequate or irregular rainfall, (iii) unsatisfactory systems of cropping, (iv) lack of good seed, (v) poor livestock and other equipment, (vi) subdivision and fragmentation of holdings, (vii) want of adequate credit facilities, (viii) a primitive system of marketing and, above all, (ix) lack of initiative and enterprise on the part of the illiterate cultivator oppressed by an outmoded system of land tenure and tenancy. These will be dealt with in detail later. Here it is proposed to confine ourselves to a factual statement of the situation in respect of some of these fundamental factors.

*Sir MacDougall was at one time the President of the Co-operative Farms Trading Society in Scotland and one of the foreign experts on the Committee. C. B. E. Report, app., p. 701.

†"Estimates of Area and Yield of Principal Crops in India, 1940-41," Table No. 2.

(i) Deterioration of Soil

The deterioration of the soil is reflected in the table below giving the figures of the average yields of crops in 1931-32 and 1940-41 for some of the Provinces.*

(Lbs. per acre).

—	Rice.			Wheat.			Sugarcane.		
	Bengal.	Bihar	U. P.	Bombay.	Bengal.	U. P.	Bombay.	Delhi.	U. P.
1931-32	961	912	718	430	525	429	6,071	3,135	1,493
1940-41	652	519	419	385	451	397	5,782	2,531	1,096
Decrease	309	393	299	45	74	32	289	604	397

Several causes are responsible for this decline in fertility of the soil in many parts of India. As already noted, the wasteful practice of using cow-dung for fuel coupled with the farmer's inability to purchase artificial fertilizers which are comparatively costly, has led to the removal year after year in the form of produce of the valuable soil properties more than are replaced by nature and the practice of the cultivator. At the same time lands have been gradually rendered unfit for profitable cultivation by the formation of injurious salts and by the action of running rain or flood water in either eroding the surface soil or burying it beneath deposits of sterile material. This is particularly noticeable in the United Provinces and Western Bengal where extensive areas on the banks of the large rivers have already lost all value owing to formation of a network of ravines. In the United Provinces alone, 8 million of the total land area of 68 million acres have been so lost, in addition to 5 million acres as a result of waterlogging, shallow tillage and defective soil aeration. Rise of the subsoil water table and formation of salt-efflorescence on the surface of soils have done considerable damage to cultivation in the canal-irrigated areas of the Bombay Deccan, Sind and the Punjab, while waterlogging is a great menace to agriculture in the Central Provinces, Assam, Bihar and Bengal. Yet little has been done to combat these forces which reduce the fertility of the soil and convert large areas into semi-deserts.

(ii) Irrigation and Water Supply

The main characteristics of the Indian rainfall have already been noted above. Except in the two zones of heavy rainfall—the Indo-Gangetic plain and the narrow tract along the west coast—any de-

* "Estimates of Area and Yield of Principal Crops in India, 1940-41." Table 2.

ficiency in rainfall causes harm both to man and cattle in the first year and, if repeated, results in a famine. Irrigation, therefore, ought to play a significant part in the country's agricultural economy. The following table shows the position of the irrigational facilities in British India and the progress made in this direction since the Report of the Irrigation Commission of 1901 :

(In million acres.)

Year.	Gross area cultivated.*	Area Irrigated by					Total Irrigated area.	Percentage of Irrigated area to total area sown.
		Canals.		Tanks.	Wells.	Other sources.		
		Government.	Private.					
1902-03	222·4	15·6	1·3	8·1	12·9	6·2	44·1	19·5
1939-40	244·0	25·1	3·9	5·9	13·5	6·5	54·9	22·5

*Including area sown more than once.

It will be seen that taking into consideration all types of water-supply, only 23 per cent. of the total area under tillage is irrigated while as much as 77 per cent. is left to depend on the monsoon. In the States which have a cultivated area of 68 million acres, about 11 million acres or only 16 per cent. of the total is irrigated. Figures in respect of some of the provinces are still more unsatisfactory. The proportion of area irrigated to total cultivated area is 8.7 per cent. in Assam, 6.4 per cent. in Bengal, 6 per cent. in Hyderabad State, 5 per cent. in Baroda, 4.5 per cent. in Bombay, 3.9 per cent. in C. P. and Berar, 7 per cent. in Central India States and 3 per cent. in Coorg.

(iii) Systems of Cropping

The methods of cultivation in India are far from satisfactory. Excessive concentration on certain crops—particularly the cash crops such as cotton, sugarcane, and wheat—has lowered the former standards of crop rotation which in themselves, according to the Royal Commission on Agriculture, need improvement with the aid of research and experiment.† In the United Provinces, for instance, sugarcane which remains in the soil for at least 9 to 12 months has altered the system of crop rotations which formerly included pea, arhar and fodder crops. In several areas of Bengal, jute has displaced the crops of pea, gram and oil seeds which helped to keep up the fertility of the soil. In some parts of Gujerat continuous raising of cotton crop is displacing the system of rotation and alternate cropping with the result that certain plant diseases and pests are appear-

† Report, p. 107.

ing. (Such departures from the system of alternate or sequential crops intensify the evil of soil depletion.)

(iv) LACK OF GOOD SEED

(Seeds of better variety have not come into popular use. The area covered by seeds of better variety is only 10.3 per cent. of the total area cultivated in the provinces and 1.3 per cent. in the states. Only in three provinces, viz., the Punjab, N.W.F.P., and Sind better seed has been in use over 25 per cent. of the sown area. In none of the other provinces, cultivation under improved seed covers more than 10 per cent. of area sown except in Bengal, while in Assam and Orissa the percentages are as low as 1.5 and 1.3 respectively. (Even the little progress in this direction is confined more or less to cash crops, as can be seen from the following table :

	British India.		Indian States.		Total.	
	Area under improved crop. ('000 acres)	Percentage of total area under the crop.	Area under improved crop. ('000 acres)	Percentage of total area under the crop.	Area under improved crop. ('000 acres)	Percentage of total area under the crop.
Rice	3,697	5·3	62	1·5	3,759	5·1
Cotton	5,302	34·5	370	5·0	5,672	25·0
Wheat	6,833	24·9	97	1·3	6,930	20·7
Jute	1,781	62·5	...	...	1,781	62·5
Sugarcane ...	2,834	76·6	22	7·2	2,856	71·1
Millets	187	0·5	160	0·7	347	0·5
Gram	80	0·6	4	0·1	84	0·4
Groundnuts ...	216	3·4	202	10·0	418	5·0
Total (including "Other crops") ...	22,056	10·3	921	1·3	22,977	8·1

The comparative neglect of rice and millets is to be especially regretted in view of the prominence of these grains in the diet of the people.)

(v) POOR LIVESTOCK AND OTHER EQUIPMENT

That half the cattle in India are more a drag on the country's resources than an aid to the exploitation thereof has been already pointed out elsewhere. The position is in no way better in respect of implements. In the major part of India, the farmer uses a wooden plough which stirs, rather than inverts the soil. The seed is merely broad cast and then ploughed into the earth. He cuts the harvest by hand, threshes the grain under the bullocks' feet and winnows cereals by the agency of the wind. Efforts are indeed being made to replace these primitive implements with improved ones but the progress is very slow. While the total number of ploughs in use in India is 32 millions, hardly 7 or 8 thousand ploughs of better variety

are being sold annually through the departmental agencies.* The position regarding fodder cutters, cane-crushers, winnowing machines and other implements is still more unsatisfactory, ploughs having been taken up more rapidly than any other implement.

(vi) Size of Holdings

No consolidated statistics are available about the distribution of holdings according to size in India. The following data given in the Report of the Royal Commission on Agriculture† in India relate to the Punjab :—

Size of holding.	*Percentage of owner's holdings to total holdings.*
Below 1 acre	17·9
Between 1 and 3 acres	25·5
" 3 " 5 "	14·9
" 5 " 10 "	18·0
Over 10 acres	23·7
	Percentage of cultivators to total cultivators.
1 acre or less	22·5
Between 1 and 2½ acres	15·4
" 2½ " 5 "	17·9
" 5 " 10 "	20·5
Over 10 acres	23·7

According to the Commission, except for Bombay, which would probably show similar result, all other Provinces have much smaller average area per cultivator. Intensive regional inquiries reveal a still more alarming state of affairs. In many parts of the country, " toy holdings " and " miniature farms " of 1/160 acre or 30¼ square yards are not unknown. In Druli Kalan (Punjab), for instance, there were 424 fields of less than .006 of an acre each. In Bengal, about half of the holdings are barely sufficient for the maintenance of the farmers who cultivate them. Special inquiries in this province have shown that 42 per cent. of the farmers' families have holdings below 2 acres each while another 21 per cent. have lands between 2 to 4 acres each.‡ Thus, on the whole, nearly two-thirds of the cultivators have holdings of less than 4 acres. The Bengal Land Revenue Commission, having surveyed the agricultural conditions in the province, came to the conclusion that the pressure of population on land was the chief cause of Bengal's economic troubles. " It is the most difficult problem we have to face because it is virtually impossible under present conditions to suggest any remedy for it."

In Madras the average holding is of 4½ acres. A holding, if it is to be economic, must have a minimum area of 5 acres of which 2.3 acres are required to be wet land. But as four-fifths of the cultivated

* In 1936-37 and 1937-38, improved ploughs sold through the departmental agencies were 6,806 and 6,716 respectively.

† Report, pp. 132-3.

‡ Report of the Bengal Land Revenue Commission, Vol. I, pp. 85-6.

area in this Province is dry land it is evident that the average holding is barely sufficient to maintain the average family. According to the Report of the Punjab Land Revenue Committee, 20 per cent. of the proprietors in the Province hold less than one acre. Those who pay less than Rs. 5 as land revenue number 1.76 million and those who pay less than Rs. 10 number 2.42 million. " Consequently many of the small proprietors who have insufficient land for the maintenance of their families, are compelled to cultivate land of the larger proprietors and pay them half the crop in the same way that the occupancy raiyat who has insufficient land cultivates as a bargadar the surplus land of the non-cultivating or well-to-do raiyat." It is estimated that a tenant in the Punjab who cultivates on the batai system, i.e., pays half the crop, would require 10 or 12 acres for the maintenance of an average sized family. In the U.P. the average area per family in the Gorakhpur division is 4.8 acres while in the Agra district 27 per cent. of the families hold less than 2½ acres and 23 per cent. hold between 2½ and 4½ acres. In the Bombay province, nearly 50 per cent. of the landowners have holdings below 5 acres each. The length to which this division and sub-division of land have gone may be seen from the average size of holdings in India and abroad.*

U.S.A.	145 acres.	Germany	21·5 acres.
Denmark	40 „	England	20·0 „
Sweden	25 „	India	5·0 „

The number of acres per cultivator according to the Census Report of 1921 was 4.91 in Madras, 3.12 in Bengal, 3.09 in Bihar and Orissa, 2.96 in Assam and 2.51 in the United Provinces.

A significant fact about Indian holdings is that they are not only minute but are also scattered over a wide area. This is the result of the custom of splitting up the property into as many fragments as there are different soils, so that each heir may get an equal share of every kind of land. A typical instance is provided by Bairampur in the Punjab where village lands were found to be divided into 1,598 fields averaging about one-fifth of an acre each ; 28 per cent. of the holdings showed that each had over thirty fields. In one of the villages in Jullunder 12,800 acres were, at one time, splintered into 63,000 fields ; in another, 584 owners cultivated 16,000 fields with an average size of only one-seventh of an acre.† Over a major part of the country it has been found that, whether the holding is large or small, it is scattered, on an average in 5 to 8 strips.

* B. P. Jain : " Agricultural Holdings in the U.P." pp. 26-27.

† *Vide* Darling : " The Punjab Peasant in Prosperity and Debt," pp. 29 and 138.

The effects of sub-division are that with every diminution in the size of the holdings, fixed costs come to bear a larger proportion to the total value of the yield and render the holdings uneconomic. Fragmentation results in waste of time and labour as the farmer and his cattle have to move from one piece of land to another. In many of the villages in Attock district (Punjab) with an area of less than a square mile " the zamindar has to go an average of two miles to his fields as against three furlongs or less, which would be the distance if the village had been laid out more scientifically." Such undersized and scattered holdings mean low productivity, waste and debt. The problem of the reconstitution of holdings is this one of the most important in any scheme of agricultural reform.

(vii) Agricultural Finance

The financial needs of the agriculturist may be broadly classified, according to the period for which accommodation is required by him, into three divisions :—

(i) Short-term or " seasonal " credit providing farmers with working capital they require for purchasing seeds and fertilizers paying wages and meeting other casual expenses such as payment of rent, interest on debt and land revenue. This loan is generally repayable out of the proceeds of the next harvest.

(ii) Medium-term credit affording farmers the means required to purchase livestock, expensive implements and to carry out land improvements of average duration. This loan is repayable in instalments spread over two to five years, and

(iii) Long-term credit, which gives farmers the means to purchase land and agricultural machinery or to effect permanent improvement on lands such as drainage and irrigation. The returns from investments on such items are very slow and hence the farmer can repay the loan in small amounts over a substantially long period upto 25 to 30 years or more.

In India, the banking organisation has not covered the rural financial system as it has done in the West. The part played by the commercial banks in agricultural finance is confined only to bigger landlords who possess tangible marketable securities and is, therefore, insignificant. The co-operative movement has covered a small ground and has not gone into the heart of the village. The State has restricted its system of loans more or less to emergency aid. The moneylender

thus remains the main prop on which the structure of rural finance rests.

But it is this very indispensability of the moneylender coupled with the inevitability of debt of the small farmer that has vitiated the system of moneylending. The moneylender has been, not unoften, lending too liberally to the farmer with a view to increasing his investments in this highly remunerative business. On many occasions, specially when he is an agriculturist moneylender, he has lent money with an eye on the debtor's lands. He has even gone to the length of keeping the debtor in serfdom as is evidenced by the Kamiauti system of economic servitude in Bihar and Orissa and the Pannaiyal system in Madras where even the law has failed to redeem the farmers. In fact, moneylending has become such a flourishing profession that even in the Punjab, where the co-operative movement may be said to have made the greatest advance, rural moneylending still ranks second in its yield of income-tax and super-tax ; if salary-earners are excluded, one out of every four income-tax payers is a rural moneylender.*

Growth of Debt

It cannot be denied that the moneylender in the past provided a valuable service to the rural population and the system worked well so long as the rural economy was organised on the basis of personal and traditional ties. With the increasing adoption of the *cash nexus* and the rigid interpretation of the law of contract by the British Courts, new opportunities of easy enrichment were opened up for the moneylender and the humane basis of the creditor-debtor relationship in the village was destroyed. The agriculturist, always a man of small means, became dependant on market prices determined by forces he could not comprehend. Whereas, formerly his requirements of cash were confined to a few occasions, now they recurred very often for the purchase of seed, payment of land revenue, etc. Thus several causes led to a rapid increase in the farmers' debts during the last six or seven decades and the mal-practices of the moneylender have multiplied. The increasing pressure on land resulting from the growth of population and the decay of cottage industries led to a general enhancement in rents and lowered the incomes of the tenant farmers. The heavy assessment of the 'sixties also played its part in adding to the burdens of the cultivators and though reduced in later years it could not bring much relief owing to " the insistence on regular cash

* Sir M. L. Darling in his evidence before the Royal Commission on Agriculture, Vol. VIII p. 592.

310,000, and 338,000 acres annually. This process of dispossession of the cultivator continued even during the present century and an increasing area of land passed from the hands of the agriculturists into those of non-agriculturists. The following table relating to the possession of holdings in the Bombay Province for the years 1926-27 and 1936-37 illustrates this statement* :

Details of Holdings.	Number of Persons ('000)				Area Held ('000)			
	Agriculturists		Non-agriculturists		Agriculturist		Non-agriculturist	
	1926-27	1936-37	1926-27	1936-37	1926-27	1936-37	1926-27	1936-37
Upto 5 acres ...	906	892	108	237	2,117	1,946	246	597
Between 5 and 15 acres.	572	509	52	162	5,121	4,624	474	1,477
,, 15 ,, 25 acres.	228	188	20	60	4,454	3,558	394	1,176
,, 25 ,, 100 acres.	208	161	22	62	8,511	6,566	1,029	2,667
,, 100 ,, 500 acres.	16	11	4	9	2,623	1,628	804	1,624
Over 500 acres	·5	·2	·4	·7	473	141	471	778
Total ...	1,930·5	1,761·2	206·4	530·7	23,299	18,463	3,418	8,319

It is thus found that during this period of ten years between 1927 and 1937, the agriculturists lost nearly 5 million acres of land, while the non-agriculturists extended lands in their possession to the same exent, the number of persons in the latter class having increased from 2 lakhs to over 5 lakhs during this period. Incidentally, it might be noticed from the table that while the agriculturists have 10.5 acres per head the non-agriculturists have 15.7 acres of land each.

As remedial measures, several efforts have been made to assist the farmer, firstly, in getting himself out of his indebtedness and, secondly, in securing finance for his occupation. These may be grouped under three main divisions, viz., (i) provision of finance by the State from its own treasury ; (ii) establishment of co-operative organisations for credit and non-credit purposes, and (iii) legislation for the relief of the debtors and for their protection against oppression and deceit by the moneylenders. How far these measures have been adequate to meet the needs of agriculture will be discussed in a subsequent section.

(viii) Agricultural Marketing and Transport

It is a well-known fact that the Indian farmer fails to get the full value even for the little produce he takes out of the soil. Being pressed by the moneylender on the one hand and by the rent collector on the other, he sells off his produce in the first available market for an uneconomic price. A long chain of dealers and middlemen makes the most of this glutting of markets soon after the harvest and leaves

* Bombay Land Revenue Administration Reports, 1926-27 and 1936-37.

only a bare subsistence to the farmer. According to the Report on Marketing of Wheat in India (1941), out of a rupee paid by the customer only eight annas and a quarter go to the real producer. The farmer's share is still less in the marketing of other commodities. He loses in bad times but gains little in good ones.

Lack of sufficient finance and of adequate transport and warehousing facilities, the absence of grading and of standard weights and measures account for this state of affairs. The farmer who is short of ready money is compelled to sell his produce for what it will fetch. Inadequate transport facilities lead to wide variations in prices of the same commodities at different centres even in the case of organised markets. Thus in June, 1931, the wheat rate at Cawnpore was Rs. 3-1 while at Karachi it was Re. 1-13-3½. Some idea of the loss resulting to the farmer from the absence of warehousing facilities and from his inability to wait may be had when we know the difference between the wheat rate at the harvesting season on the one hand (Rs. 2-8 in May, 1931) and the wheat rate at the sowing season on the other (Rs. 3-8 in October, 1931). The corresponding quotations for rice were Re. 1-4 (December) and Rs. 2 (April) respectively. Warehousing facilities need both to be extended and improved. Defective methods of storage lead to deterioration of the commodities and consequently to loss in value which in the case of rice alone is about 5 per cent. or 40 million maunds valued at Rs. 120 millions a year. The prevalence of a variety of local and regional weights and measures leads to false weighments, and much deception of the cultivator. The Royal Commission on Agriculture found that in 16 markets of the East Khandesh district the maund had 13 different values ranging from 21½ to 80 seers. The Bombay khandi was of 784 pounds, the Madras khandi was of 500 pounds and in Khandesh the khandi varied from 160 to 250 pounds. In the Jhelum district in the Punjab six different measures by which grain was weighed and sold was found within an area of 60 square miles. As far back as in 1913, a Committee appointed to investigate into this subject had recommended that the maund of 82.2/7 pounds should be declared the standard weight for India. Till recently, no action had been taken by the Government in this direction. In 1928, a law was passed in the Central Provinces empowering the Government to secure standardisation by notifying areas for the purposes of the Act. The Bombay Government passed a similar law in 1935. In 1939, a Standards of Weight Act was passed by the Central Legislature and draft Bills

for giving local effect to the standards of weights were prescribed under the Act.

The development of co-operative marketing has been very slow in India. The main obstacles to progress in this field are lack of skilled technical advice and guidance, ignorance about market conditions and trends, want of ability to manage business, inadequate finance and lack of storage and transport facilities. Above all, the moneylender still continues to have a large claim on the cultivator and his crops. The success of co-operative marketing is thus confined to a limited number of crops or to a few areas. The most promising development, however, has been in the marketing of sugarcane in the U.P. and Bihar and in the sale of cotton in Bombay. Madras has a large number of Societies, the value of the total produce handled by them being double that of Bombay. The following table shows the position of these societies (the production, sale and purchase societies and the purchase and sale societies combined) in India.*

——	No. of socie- ties.	No. of mem- bers. (Thou- (sand.)	Working capital. (Rs. '000)	Sale of goods to members. (Rs. '000)	Value of members' produce purchased. (Rs. '000)	Approxi- mate value of the total produce handled. (Rs. '000)	Cost of manage- ment. (Rs.'000)
Provinces ...	3,980	446 †4	1,40,53	2,28,66	2,97,53	11,06,25	11,15
States	140	8	6,21	16,40	16,16	35,56	42
Total India ...	4,120	454 †4	1,46,74	2,45,06	3,13,69	11,41,81	11,57

† Member societies.

Thus taking all the agricultural trading societies together the value of the total produces handled by them was Rs. 11.4 crores ; but of these nearly Rs. 7 crores was in respect of only sugarcane societies in the U.P. and Bihar. It is thus obvious that the sale movement has not sufficiently spread itself in India. The progress is appreciable in the U.P., Madras, Bombay and the Punjab but in some other Provinces and States, the movement has made only a limited advance, while in Ajmer-Merwara, Delhi, Bhopal, Indore and Kashmir it is almost insignificant.

Backwardness of transport adds to the costs of marketing which in India are estimated to be about 20 per cent. of the price even where the wholesale dealer is within a radius of 15 miles from the

* Report on the Co-operative Marketing of Agricultural Produce in India (1943), p. 32.

village. The mileage of all roads per 100,000 of the population is 85 in India as against 2,500 in the U.S.A. Even out of the existing 285,000 miles of roads, not more than 85,000 or 30 per cent. are motorable in all weather, 100,000 miles are motorable only in fair weather, while the remaining 100,000 are not motorable at all. India has, per square mile, a road mileage of .24 as against 2 in England and 4.4 in Japan. Even the position of the existing roads is far from satisfactory. Recently, Sir Kenneth Mitchell, Controller of Road Transport, Government of India, declared during the 8th Session of the Indian Roads Congress that village roads and a number of district roads in India have not only not progressed but have deteriorated with the increasing traffic of more crops, more people and more travel arising from security and general awakening. " There has thus accumulated a burden of arrears of overdue improvement which is sometimes staggering to contemplate. There are hundreds, probably thousands of large villages, at some distance from any roads supposedly maintained by public authority, and many miles from any modern road and there is general neglect of the link between the village and the public road. The people in those villages are primary producers of crops and revenue. Every maund of exportable foodstuffs, cotton, etc., originates in the village and starts its journey to market along the village or unmetalled district road, and the service which the people get from these roads is quite inadequate."

The position is similarly unsatisfactory in respect of other means of transport. India has 41,000 miles of railways while Europe (excepting Russia) which is equal to India in size has 190,000 miles. It is considered quite within the reach of the country to have this railway mileage doubled.* A more important aspect of the railway policy in India, however, is in respect of rates which, it is contended, are based largely on considerations completely extraneous to the industrial and agricultural development of India. The importance of a sympathetic railway rates policy emerges from the fact that the railways carry a large per cent. of the total volume of goods and services moved within the country. Waterways are also a valuable means of transport in India and, in fact, as Sir Arthur Cotton—the architect of the Kaveri and Godavari works—had made clear nearly forty years ago, canals are more suitable to Indian requirements and less expensive than railways and have an additional advantage that

* Industrialisation in India," Dr. P. S. Lokanathan, p. 19.

they can be combined with irrigation. Sir Arthur himself had a scheme of navigable canals for India but the British Parliament in 1872 put it down because the scheme involved an expenditure of £30 million and it was opposed by the railway interests in India. India has fair prospects of developing waterways, for though the peninsular rivers are not so favourable for this purpose, great river systems of Northern India are stated to afford about 26,000 miles of waterways for navigation, which is more than half of the railway mileage in the country. Besides, all along the coast there are many small rivers, creeks and backwaters which can provide facilities for water transport. The Industrial Commission admitted the benefit from waterways to agriculture and industry and the National Planning Committee emphasised the need of development and control of the rivers and waterways through provincial and inter-provincial commissions.

The above facts make plain the inadequacy of the transport facilities in India ; yet, the whole inland trade which is more than 2½ times that of foreign trade of the country is dependent on these facilities. From the point of view of agriculture, for every acre that is cultivated to supply the foreign market, there are eleven acres which provide for internal consumption. Again, not all the provinces in India are self-sufficient in respect of food production and, therefore, only an efficient and co-ordinated system of transport—starting from the producing village in the surplus province to the consuming centre in the deficit province—can guard the people against suffering in times of scarcity, famine, flood and such other distress.

(ix) LAND TENURE AND TENANCY

The system of land tenure in India may be broadly classified into three divisions : (i) the zamindari or landlord tenure where one person or a few joint owners are made responsible for the land revenue on the whole estate ; (ii) the Mahalwari or joint-village tenure where the village estates are held by co-sharing bodies or village communities, the members being jointly and severally liable for the land income ; and (iii) the ryotwari or peasant proprietor tenure where each of the individual holders in the village is directly responsible for the payment of land revenue. The following table gives the distribution of the tenure systems in different provinces of India:—

Area in acres under three main types of land tenures in different provinces of India 1937-38

(Area in thousands of acres.)

Provinces.	Ryotwari.	Zamindari permanently settled.	Zamindari and village communities temporarily settled.	Total area.
Ajmer-Merwara ...	......	974	797	1,771
Assam	29,868	3,919	1,698	35,485
Bengal...	......	39,158	10,100	49,258
Bihar	......	39,694	4,630	44,324
Bombay	44,676	......	3,977	48,653
Central Provinces and Berar	11,192	......	39,465	50,657
Coorg	1,012	......	......	1,012
Delhi	......	......	369	369
Madras	62,176	28,843	......	91,019
N. W. F. P.	......	......	8,577	8,577
Orissa	3,930	9,861	6,815	20,606
Punjab	......	......	60,155	60,155
Sind	30,180	......	......	30,180
United Provinces	......	7,306	60,660	67,966
Total for British India ...	183,034	129,755	197,243	510,032
Percentage of total in British India	36%	25%	39%	100

It is thus seen that 25 per cent. of the area is permanently settled under the Zamindari tenure and 39 per cent. temporarily settled under Zamindari and Mahalwari tenure ; the Ryotwari tenure covers 36 per cent. of the total area.

The period of settlement, like the system of tenure, shows variations from one part of the country to another. Large areas mainly in Bengal, Bihar and North Madras totalling 130 million acres, have the revenue due to the Government fixed in perpetuity by the 'Permanent Settlement' effected with the landlords during the earlier period of the British rule in India. This system was later found to be defective. It meant a loss of revenue to Government, and it led to rack renting and feudalism of tenants. It was, therefore, decided to make settlements in other areas on a temporary basis. Thus the settlement is revised every 20 years in C.P., 30 years in Bombay, Madras and U.P. and 40 years in the Punjab.

The system of assessment also shows great variations. In some Provinces as in the U.P., C.P., the Punjab and Bombay, the basis of assessment is rent whereas in some others, as in Madras, it is the net produce. There is no definite provision for varying the assessment in any year in accordance with change in prices except in Bombay where, recently, the Land Revenue Code was amended to include such a provision. A large amount of discretion is allowed to the Settlement Officer who further modifies to basic principles by introducing a

number of miscellaneous factors. The net result is that the incidence of land revenue is not the same all over the country. In the Ryotwari areas of the Punjab, the proportion of assessment to net rent varies from 19 to 36 per cent. while in Bombay it varies from 17 to 50 per cent. in different parts of the Province. In Berar, in the case of two cotton taluks, the average is 10 per cent. whereas in the case of Madras it is in the neighbourhood of 17 per cent. in half of the districts. This element of inequality is further brought out by comparing the assessment in the permanently settled areas. In Bengal, the average revenue incidence per acre for permanently settled areas is Re. 0-9-0 whereas it is Rs. 1-15 per acre in the rest of the province. Even within the permanently settled parts, there is complete absence of uniformity, the assessment being as high as Rs. 1-14 per acre in Howrah district and as low as Re. 0-3-3 in the district of Mymensingh.* It is obvious that such striking variations are a result of defective and unco-ordinated system of assessment and have no relation whatsoever to the productivity of the soil.

Another unsatisfactory characteristic of the Indian land system is in respect of rents. To a great extent, the prevailing types of land tenure have divided those interested in agriculture into two main classes, viz., (i) the zamindars, members of joint village communities and the bigger ryots who own the land but do not cultivate it themselves and (ii) the actual cultivators comprising smaller ryots and tenants, the latter acquiring land on lease from the landlord on payment of rent. Roughly, it may be said that almost all the area under zamindari and mahalwari tenure or 64 per cent. of the total area under cultivation in British India is being tilled by tenants while the landlords confine their interest in the land to drawing the utmost rent possible from the actual cultivator. In fact, this type of functionless landlordism of a parasitic class prevails over a wider area, since even in the ryotwari area, almost every owner of over 25 acres of land lets a part of it to a tenant.†. (Further, the practice of letting lands on lease is gathering strength because, wherever, as a result of the cultivators' indebtedness, expropriation of lands takes place, the new owners generally do not take to the cultivation of the soil but allow the former owners to cultivate the lands as tenants.)

Not only is tenancy on the increase but wherever there was a margin between the fixed land revenue and the economic rent of the

* Azizul Huque: "The Man Behind the Plough," Table 58, p. 182.

† Calvert, H.: "Wealth and Welfare of the Punjab," p. 75.

land—particularly in the zamindari areas—there has risen a number of intermediate interests between the landlord and the actual cultivator due to a process of letting and subletting of land. In Bengal the chain of such middlemen is lengthening and, as the Simon Commission pointed out, there have been found in some cases as many as 50 or more intermediate interests between the landlord at the top and the cultivator at the bottom. Even the ryotwari area has not been immune to this process of sub-infeudation.

Tenant cultivation thus being predominant in Indian agriculture, the proportion of rent that the tenant has to pay to the landlord has a vital bearing on the agriculturists' income. It has been estimated that almost 50 to 60 per cent. of the gross produce on an average is handed over by the cultivator to the landlord towards payment of rent. In a country of small holdings averaging hardly 4 acres in size, such proportions of rent payments are definitely high as so much is taken away from what is already insufficient to feed the cultivator and his family. A survey of 27 representative farms under tenancy in the Punjab indicated that " of the net income of cultivation, less than 18 per cent. is enjoyed by the worker and the rest goes to the non-working owner of the land." Rack renting has reached such a stage even in the ryotwari provinces that it has become difficult to distinguish between a labourer and a cultivating tenant. This is particularly the case where the system of crop-sharing prevails.* In Bengal, about 5.6 million acres forming nearly one-fifth of the total sown area of the province are cultivated under this system. These share-croppers are generally landless labourers, expropriated proprietors or occupancy tenants with unduly small holdings. The proportion of the landlord's share in the crop varies, but one-half is the rule. The landlord thus saves the cost of cultivation, avoids all risks in the enterprise and is yet assured of some return from his lands. In addition to his share, he makes the tenant pay premium and render other services for being permitted to cultivate land. The incidence of rent on this system is estimated to be Rs. 25 per acre as against an average of Rs. 3-5 per acre for occupancy tenants in Bengal. Thus, even if the share of the cultivator is increased to two-thirds of the gross produce, the share-cropped will be paying in rent nearly 5½ times as much as the occupancy tenant, the existing proportion being nearly 7½. In Bihar, the area cultivated by share-croppers is nearly 20 per cent. of the sown area. The landlord's share, except where

* We are indebted to Dr. Gyanchand for permission to use for this section his paper on "Crop Sharing in India," read at the fourth Conference of this Society at Walchandnagar.

it is a fixed quantity of grain per bigha, was reduced a few years ago by law from half to nine-twentieths, but this has led the landlord to call upon the tenant to render labour services, make presents or pay dues or tolls—claims which were made illegal over 80 years ago but still continue owing to the helplessness of the tenant. In the Punjab Provinces nearly one-fourth of the sown area may be said to be under this system, the share-croppers having to pay half the gross produce and, in most cases, many other prerequisite levies. In the Punjab about 50 per cent. of the sown area is cultivated by tenants-at-will who are all share-croppers. The proportion of the landlord's share in this Province varies from ¼ to ½, but the latter is generally the rule. The position in Sind and the N.W.F. Province is very similar to that in the Punjab. Rack-renting on this system is spreading in other provinces as well.

It is obvious from the above that in India the land system itself is defective in several respects. The tenure system based on the permanent settlement has led to a number of evils such as absentee-landlordism, rack-renting, economic serfdom of tenants, etc., nor is the area under the other tenures immune from these evils. Further, the absence of any single system of clearly recognised principles makes the revenue system also iniquitous and arbitrary. At the same time, the system of tenancy that has evolved out of the helplessness of the poorer agriculturists has been further pauperising them and is resulting in a reckless use of land.

CHAPTER IV

FOOD SUPPLY AND NUTRITION

RECENT TRENDS

THE rapid increase in the population of India during the last six or seven decades has time and again raised a controversy as to whether the food production in the country has been keeping pace with the increase in the number of mouths to be fed. Indian agricultural statistics, however, are known to be inadequate and defective. As the Bowley-Robertson Committee put it, "The figures at present are quite insufficient to determine whether or not food is increasing in proportion to population."* Still, judging from such data as

* an Economic Census of India." p. 85.

are available, the conclusion seems to be warranted that the food situation has of late been deteriorating. As far back as 1880, the Famine Commission placed the outturn of foodgrains at 52 million tons and consumption at 47 million tons thus leaving a surplus of 5 million tons. At the same time, the Commission sounded a note of warning that excessive pressure of the population on land was resulting in inefficient cultivation. The Famine Commission of 1898 expressed the opinion that " whatever may have been the normal annual surplus of foodgrains in 1880, the present surplus cannot be greater than that figure." It is possible that, for a time, improved cultivation and extension of irrigation helped to maintain a correspondence between the growth of population and food-supply ; but soon this balance was upset. In 1914, the Prices Enquiry Committee emphatically declared that " population has increased by a larger percentage in the period under inquiry (1890-1912) than either the total area under cultivation, or the area under foodgrains, or, in other words, the requirements of foodgrains for internal consumption have increased in a larger proportion than the total production of foodgrains." This, in the opinion of the Committee, was due to (i) the substitution of non-food for food-crops and (ii) the inferior quality of the new areas brought under cultivation which naturally meant a comparatively low productivity. The situation may now be summed up in the following statement tracing the growth of population and area under cultivation in British India during the first three decades of the present century*:—

Year.	Population.		Area cultivated.			Average area cultivated.		
	Population (in million.)	Index No.	Year.	Area (in million acres.)	Index No.	Period.	Area (in million acres.)	Index No.
1901	231·14	100	1900-1	197·11	100	1900-01 to 1909-10	209·37	100
1911	243·79	104	1910-11	222·91	113	1910-11 to 1919-20	221·35	106
1921	246·85	111	1920-21	222·82	113	1920-21 to 1929-30	225·95	108
1931	271·53	117	1930-31	228·16	116	1930-31 to 1933-34	229·71	110

How the situation has further deteriorated during the last decade is shown in the following figures of food production and population† :—

* Dr. Gyanchand : " India's Teeming Millions," p. 190.

† See *Indian Finance*, 7th August, 1943, pp. 261-62.

	Area under chief grains and pulses (million acres).			Yield of food grains and pulses (million tons.)			Population (in millions.)	
—	Rice.	Wheat.	All food grains and pulses.	Rice.	Wheat.	All food grains and pulses.	Year	—
1929-30 ...	66·5	24·7	155·9	25·5	8·9	49·1	1931	256·9
1939-40 ...	70·1	26·1	158·2	24·6	8·9	47·2	1941	295·8
Percentage Increase (+) or Decrease(—) ...	+5·6	+5·7	+1·5	—3·7	...	—3·9	...	+15·2

These statistics show that despite an increase of 1.5 per cent. in the area under foodgrains and pulses during these ten years, the total foodgrains production declined by nearly 4 per cent, while the population increased by over 15 per cent.

Sir John Megaw's Inquiry.

A very revealing picture of normal food shortage in India and the extent of suffering to the people resulting therefrom is given in a report published about seven years ago by Sir John Megaw, one of the highest medical authorities under the Government of India. This Report was based on an elaborate inquiry conducted under Sir John Megaw's own direction by about 600 doctors settled in typical agricultural villages in all the provinces of British India. The following table gives a summary of some of the results of the inquiry* :—

Province.	Total population dealt with.	Average number of acres cultivated per family.	Average number of members of each family.	Percentage of "well-nourished."	Percentage of "poorly-nourished."	Percentage of "very badly nourished."	Average consumption of milk by each adult (in oz.)	Infant mortality during the first year (per 1000 births.)	Maternal mortality (per 1000 births).
Assam ...	22,552	6·9	5·6	53	38	9	2·3	250	26·4
U. P. ...	52,055	9·6	5·4	40	39	21	5·0	303	18·0
C. P. ...	85,851	16·5	5·0	32	50	18	0·8	296	8·2
Madras ...	278,377	6·3	5·0	46	36	18	1·7	198	13·2
Bengal ...	93,921	5·0	5·5	22	47	31	2·0	189	49·2
Bihar ...	35,748	5·7	5·8	42	40	18	3·0	242	26·6
Punjab ...	108,813	17·3	6·2	42	38	20	10·0	206	18·7
Bombay	68,700	13·8	5·2	45	44	11	4·0	214	20·1
Average for British India ...	...	8·4	5·4	39	41	20	3·5	232	24·5

The investigation thus showed that only 39 per cent. of the people were adequately nourished, 41 per cent. poorly so and 20 per cent. came under the category of "very badly nourished." Bengal with proportions of 22 per cent., 47 per cent. and 31 per cent. under these three classifications respectively was the worst of all the

* Sir John Megaw : "An Inquiry into Certain Public Health Aspects of Village Life in India' (1933), p. 10.

provinces. The main conclusions of the report are : (i) in nearly 40 per cent. of the villages, the population was excessive in relation to the food supply, as a result of which India has a very poorly nourished population ; (ii) the average span of life is less than half of what it might be ; (iii) periods of food scarcity or famine have been occurring in one village out of every five during a ten-year period in which there has been no exceptional failure of the rains ; and (iv) in spite of the excessively high death-rate, the population has been increasing much more rapidly than the output of Food and other commodities.

Further proof to the seriousness of situation in India is supplied by all the well-known indirect indices of over-population, such as, the poor physique of the people, the high death-rate, the heavy infant and maternal mortality, the wide prevalence of the "poverty diseases" and the heavy toll of lives by famines and epidemics. The average expectation of life in India is less than half as many years as that in England while the death-rate in India is more than double and the infant mortality nearly treble. America and several countries in Europe have added 12 years to their peoples' average expectation of life and raised it to over 62 during the last six decades—in some countries the span of life was almost doubled—while India, during the same period, made an advance of only one year from 25 to 26.

Malnutrition

The quality of food consumed by the people is as important from the point of view of nutrition and health as quantity. Here again, the conditions in India are unsatisfactory because even the limited supply that is available is poor in its nutritional value. The gradual exhaustion of the soil, the inferior character of the lands newly brought under the plough, and the continuous diminution and fragmentation of holdings have led to increased production of less nutritive cereals such as barley, jowar, bajree and maize as compared to the production of more nutritious cereals such as wheat and rice. Taking, for instance, 1910 as the basic year, the index of production of barley in 1938 stood at 157, of jowar at 210, whereas that of rice was only 103.5 and that of wheat (after declining to 97.8 in 1935) rose to 104.2. The situation is further intensified by the low intake of vegetable and animal foods and dairy products which contain valuable proteins and vitamins. It has been already noted that the area under fruits and vegetables, including spices, is less than 3 per cent. of the sown area in British India. The daily consumption of milk per head of the population in the country is only 7 oz. as against

39 in Great Britain, 40 in Denmark, 57 in New Zealand and 63 in Finland. The following table drawn up by Dr. Aykroyd shows a common ill-balanced diet and a well-balanced one which should be substituted for it.*

	Per consumption unit in oz. per day.	
	A common ill-balanced diet.	*A well-balanced diet.*
Cereals	20	15
Pulse	1	3
Vegetables—		
Green leafy	2	4
Non-leafy	2	6
Fats and oils	0·5	2
Fruits	—	2
Milk	2	8

Effects of the War

It is an eloquent comment on the food situation in India that even the impetus to increased production under the exigencies of the war demands has failed to bring forth any substantial results. Some of the factors which are responsible for the increased demand for foodstuffs may be noted here. Firstly, there are the additional requirements for a million evacuees and war prisoners, and for a larger foreign army in India. Secondly, internal consumption has also increased to the extent that the new recruits to the army and the workers in the new industries are consuming food in larger quantities than before the war. Then, again, on the supply side, the position has definitely worsened—particularly since the loss of Burma which meant a cutting off of 5 per cent. of our annual rice consumption. But the Centre has throughout hesitated to adopt any bold and comprehensive policy, while the several provinces have been trying to tackle the problem without any co-ordinated plan. In certain respects the policy pursued shows even a lack of consistency. Thus, while efforts are being made, on the one hand, to grow more food for the people, the excess of imports of foodgrains, on the other, has steadily declined from 2.15 million tons in 1939 to 1.23 million in 1940 and .5 million tons in 1941. In fact, in 1942, it was exports which exceeded imports to the extent of about .2 million tons. The prospects of an increased food production still appear vague and uncertain. In 1940-41 the production of wheat showed a slight decline of .8 million tons to 10.0 million tons as compared with the previous year and rice a fall of 3.7 million tons to 22 million tons during these two years. In 1942, however, the production of wheat showed some improvement, but the total output was still below the 1939-40 level. Much of the incentive to this improvement over the 1940-41 level

* W. R. Aykroyd and B. G. Krishnan: *Indian Journ. Med. Res.*, 1936, Vol. 23, p. 731.

must have come from the relatively lower prices of oilseeds and cotton during the year. It is, therefore, not improbable that the recent rise in the prices of non-food crops, viz., oilseeds, cotton, etc., may prove a drawback in the programme for increased production hereafter and thus make the situation more serious than before.

PRICE CONTROL AND FOOD SUPPLY

Government policy in regard to price control of foodstuffs has evolved through a process of trial and error, so that India had to go through the experience of failure of supplies, black markets, hoarding and the breakdown of distributive machinery which could well have been avoided in the light of the results of several price control measures adopted in other countries during the last war. Price control was adopted in a piecemeal fashion, and there was no co-ordination between the various provincial policies. The continued expansion of currency made the task of the controlling authorities more difficult, and, at a certain stage, it looked as though control would have to be entirely given up. It was only after the Basic Plan of Major-General Wood failed that the gravity of the situation was to some extent realised. The food position in this country has demonstrated the economic indivisibility of India and has laid bare the dangers of lack of co-ordination in such matters in the name of Provincial Autonomy. Even after all the conferences that have taken place during the last three years or so, and in spite of the many debates that have taken place in the Legislature, the position to-day is by no means reassuring, for the Government of India are not in a position to take over the entire procurement operations into their own hands, and to assure to every citizen adequate food at reasonable prices. Hence, indeed, has the Food Grains Committee Report recommended imports as a remedial measures so as to mitigate the situation. The problem, it is clear, is one of adequate supplies as well as distribution through proper rationing arrangements, so that no section of the people has to bear more than its fair share of the sacrifices necessary for the war effort in the shape of diminished consumption.

FOOD SITUATION IN BRITAIN

What Great Britain has achieved by a well-planned agricultural policy* stands in marked contrast with the results achieved in India. In the former country, grass and derelict lands are being brought under cultivation while the productivity of the existing cultivated

* "Food Control in Great Britain," International Labour Officer, Chapter II.

area is being raised. No less important is the livestock development policy with its special emphasis on increased production of milk and feeding stuffs. In pursuance of these aims, efforts are made to increase labour supply or to supplement it by further mechanisation of agriculture, to extend drainage, distribute fertilisers, eliminate pests and plan diseases, and to extend information and educational facilities. By a system of guaranteed prices and markets, the risks of price fluctuations have been eliminated. Extension of credit also forms a part of the policy. But the most important device adopted is State subsidies whereby the farmer is enabled to take to several costly land improvements, which, otherwise, he could not afford. Thus, on the outbreak of the present war, the Ministry of Agriculture started giving a subsidy of £2 per acre for ploughing up of 7-year grass land and bringing it into efficient cultivation. By May 1941, over 2 million acres in the whole of the country were newly brought under the plough and by November 1941, the total area under food crops was 45 per cent. above the peace-time figure. Subsidies were also given to facilitate the use of costly fertilizers such as lime and to encourage the eradication of bracken and to help the farmer to extend drainage.

As a result of all these efforts, the United Kingdom has added 45 per cent. to its area under cultivation and secured a 50 per cent. increase in the output of cereals. At the same time, the imports of foods have been maintained at a higher level than before by placing the purchase of foreign supplies under the Ministry of Food while the effects of maldistribution of purchasing power are modified by price control, rationing and subsidies.

Need for a Food Policy

The failure of food policy in India, on the other hand, has created an unprecedented crisis in Bengal, where the people died by the thousand every week and instances were recorded of sales of land in exchange for a week's supply of food. This has meant a disruption of the socio-economic life of Bengal. The persistent and widespread demand for an impartial and thorough enquiry into the whole situation indicates the profound misgivings responsible sections of the people have in regard to the whole situation. The conditions in other parts of India are also by no means reassuring and there is ground for fear that if timely steps are not taken, the Bengal "famine" may extend to other parts of the country. We are not here concerned with the immediate short-run problem of the relief

of the destitute necessitated by this situation ; nor can we bring out here the relation between the food crisis and the inflationary currency policy followed by the Government of India. Our contention here is that this short-run problem is not one of short-run implications only ; it is the reflection of a long-run maladjustment which demands a well-formulated food policy.

The urgency of this long-term problem will be seen more clearly if we reflect on the relation of food supply to national health. Sir John Megaw's and Dr. Aykroyd's investigations, referred to above, have pointed out how under-nourishment and malnutrition are responsible for the low standards of physical development and the easy susceptibility of the people to disease and death. Between the Great War of 1914-18 and the outbreak of the present war, the average consumption of protective foods in Great Britain increased roughly by about 50 per cent. and the children leaving school in 1938 were between 2 and 3 inches taller than their parents at the same age. There is nothing to show that similar improvement in the consumption of protective foods has taken place in India. In fact, it would appear from general observation that the trend in India has been definitely on the retrograde. Milk consumption, for instance, increased in Great Britain from 754 million gallons in 1938 to 945 million gallons in 1941 or by 25 per cent.; the latest report on the Marketing of Milk in India, however, states that the daily *per capita* consumption of milk in the country has fallen by 12 per cent. to 5.8 oz. between 1935 and 1940.

The problem of India's national health and efficiency is, at bottom, an economic one. According to Dr. Aykroyd,* the well-balanced diet prescribed by him in the table already quoted would cost Rs. 5 to Rs. 6 per month per head while the ill-balanced common diet of the villager costs Rs. 2-8. This would imply that the purchasing power of the masses would have at least to be doubled before they could afford the more expensive well-balanced diet. Assuming that the average family in rural India consists of two adults and three children, the minimum expenditure necessary for securing a well-balanced diet would amount to about Rs. 220 per annum. This figure may well be compared with Dr. Rao's estimate of Rs. 180 of annual income per worker in India and, in particular, with his estimate of Rs. 135 of income per rural worker. In short, the purchasing power of the vast majority of the population is so low that they cannot afford a well-balanced and adequate diet.

* "Health Bulletin" No. 23, p. 15. This refers to pre-war conditions.

The food supply in India, therefore, needs both to be increased and improved. Our efforts should be towards not only adding to the existing supply but also making it varied, rich and nutritious. A bold and comprehensive policy of maximum food production with special reference to the more nutritive cereals and vegetable and animal foods such as wheat, milk, eggs, meat and fish is necessary in the interests of health and efficiency. This production drive would also have to be supplemented by provision for instruction of the masses as to the nutritive value of different kinds of foods, the methods of cooking the same and the connection between food and health. In any case, the present policy of indifference in regard to the question of food supply and of national health and efficiency is out of question. Unless the productivity of agriculture is increased, and it can certainly be increased, there is little doubt that India cannot produce sufficient food supply for her population.*

CHAPTER V

SOCIAL SERVICES IN INDIA

THE OBJECT OF SOCIAL SERVICES

To complete the picture of our rural life and problems, it is necessary, finally, to sketch the scope of social services in India. Such services have in Western countries been contributing materially to the real income of the poor classes by providing them with amenities and services which would be outside their reach on the usual basis of market price and profits. They have also the wider aim of correcting the shortcomings of the present economic system of allaying social distress and class conflict and of improving the standard of education and enlightenment in the community. An increasing proportion of the State's income is thus devoted to these nation-building activities and this involves a redistribution, on the one hand, of the burden of taxation and, on the other, of the benefits of public expenditure in the interests of the poorer classes. The Beveridge Plan of Social Security is but a logical development of this trend.

STATE POLICY IN INDIA

State policy in India has proceeded along different lines. The main concern of Government, however, has been external defence and internal security. In matters of positive reform, *laizzez faire* has been the keynote of policy. The recurrence of famines during the

* This does not mean that it would be safe or right to let population go on increasing at the present rate. In fact, deliberate regulation of the size of the family must be regarded as an important objective of a population control policy.

nineteenth century compelled Government to take a more active interest in famine relief and the pressure of developments abroad and in this country necessarily led to some modification of the general attitude of passivity. The introduction of Dyarchy in 1919 strengthened the popular demand for more nation-building activities but little could be done as the popular ministers had no control over finance. The allocation of revenue as between the Centre and Provinces has been another factor hindering the extension of social services by Provincial Governments, so that the progress recorded in this sphere so far is meagre relatively to that attained in other countries and also to the needs of this country. In 1933-34, for instance, social services absorbed only 8.5 per cent. of the total State expenditure in India as against 17.5 per cent. in Australia, 22.2 per cent. in Germany and 25.9 per cent. in the United Kingdom ; *per capita,* this expenditure amounted to Rs. 22.5 in Australia and Rs. 57.9 in the United Kingdom as against only Rs. .66 in India.* Let us, however, survey the character and extent of such services as do exist so as to enable us to see more clearly the future possibilities in this direction.

HEALTH SERVICES AND MEDICAL RELIEF

The prevention of contagious diseases and epidemics has attracted more attention than any other welfare activity in India, because of their wide incidence and frequent recurrence in the country. The medical services in India were originally designed to protect the health of the Army and Europeans and till 1870 they were intended to improve the health primarily of the military and only secondarily of the general population. The heavy mortality in times of famine, plague, and malaria awakened the Government to the need of more active measures at the beginning of the present century ; but almost till the Reforms of 1919 the efforts were confined more or less to the promotion of sanitation by making it one of the most important duties of local bodies. Even in this direction, the progress was very slow. The first All-India Sanitary Conference (1911) expressed dissatisfaction that only 1.4 per cent. of the towns and villages in Madras Presidency had any system of conservancy and that in other Provinces, the condition was no better. The Reforms of 1919 which transferred the responsibility for local medical and public health administration to the Provincial Governments have, of course, considerably widened the field of activity. But the quality of work still suffers from the weak control of the Provincial authorities on the local bodies to whom the work is entrusted. The result has been

* C. N. Vakil and M. H. Patel : "Finance Under Provincial Autonomy," p. 48.

that only a fraction of the ground has been covered by these provisions. Even in urban areas where the improvement is more marked than in rural parts, the level of health services is unsatisfactorily low. In Bengal, for instance, we are told: "Of the 116 second class municipalities only 27 are provided with full-time medical officers of health. Twenty-eight do not have a sanitary inspector, while eleven do not have even a vaccinator, who is generally the first type of public health officer to be employed. Even the two first class municipalities have only one whole-time medical officer . . . In general, the activities are mainly of the 'impersonal' type, relating mainly to registration, sanitation, food adulteration, etc. Exceptions are small-pox, vaccination, malaria control and very considerable activity in maternity and child-welfare. School and industrial health are markedly absent, as is control of venereal diseases."*

The health administration is still more unsatisfactory when we consider the needs of the rural masses. Sanitary reform, village planning, housing schemes are still unknown over the major part of rural India. Medical assistance and relief which is inadequate even for the urban people is much more so for the rural masses. Malaria and other fevers continue to take a heavy toll of lives. The curative dispensaries and hospitals total 6,500 which can treat annually only 35 million patients, the remaining bulk of the population thus being left to rely on the practitioners of indigenous systems of medicine. The number of doctors practising in the country is about 42,000 ; even if we adopt the standard of one doctor per 2,000 of the population, India would need this number to be increased nearly five-fold. Our mortality rates, therefore, still continue to be deplorably high while the longevity of the people has remained constant. The mortality rates from small-pox and cholera which were practically the same in Asiatic countries at the beginning of the century have been reduced to an insignificant percentage by other countries like Japan and Siam while in India the rates continue almost unaffected.

It is, however, assuring to note that recently the member for the Department of Education, Health and Lands announced the appointment of a Public Health Commission to survey on the broadest national basis the whole problem of medical relief and public health in India and to make suggestions for future development. The Commission is to investigate every part of the problem of health, curative as well as preventive, including medical relief, particularly in rural areas, medical education and research and the production and supply of

* Sir John Grant: "The Health of India," pp. 21-22.

drugs and medicines. Nutrition research and balanced diets for different sections and classes, having regard both to the earning capacities of the people and their habits, are an important branch of the Commission's task. The Report is expected within nine months of the commencement of sittings of the Commission.

EDUCATION

Education is, in some respects, the most important of social services as it increases the capacity of the people to respond intelligently to measures taken to increase their own welfare. The higher the standard of education, the better the results of other social services. The backward character of the Indian masses in this respect and the causes thereof need not be dilated upon here. Since 1881, the population has been increasing at the average rate of 7.3 per cent. per decade, while the percentage of literates is increasing hardly by .7 per cent. per decade. In 1938-39, only 11.6 million pupils or 3.9 per cent. of the total population were receiving primary education ; pupils under instruction in all institutions were 5.6 per cent. of the population. While the general level of education itself is low, that of female education is still more unsatisfactory. The number of schools for girls in British India is about 28,500 ; even if we assume that all these schools are in rural areas, there would be, on an average, one school for every 16 villages.

The percentage of literacy, according to the 1931 Census, was 9.5 for British India ; the figure would be still lower if we exclude Burma which had the highest percentage of literates in the whole of India. This unsatisfactory progress is mostly due to the present defective national system of education which is neither national in character nor backed by sufficient finance as to make it free and compulsory. The recent Report of the Sargent Committee on Education visualises a scheme of education which would answer the minimum requirements of the country. The scheme, according to the Report, would cost annually, at the end of between 40 and 50 years when it would be fully established, Rs. 313 crores of which Rs. 277 crores will have to come from public funds. The inadequacy of the present expenditure on education becomes obvious when we compare the above figures with the expenditure on this head amounting to Rs. 29 crores in 1939-40, of which Rs. 13 crores came from Government.

SOCIAL INSURANCE

Social Insurance is another important service that may be considered. Of course, in respect of regulation of working hours, leave with pay, workmen's compensation, etc., India is more or less abreast

with advanced countries but the more vital provisions of welfare such as unemployment and health insurance, old age pensions and family allowance are almost unknown to the Indian labourer. The importance of providing good housing has been realised but the slums, somehow, still continue. The Royal Commission on Labour (1931) made detailed recommendations in this direction but the major ones among these have been shelved. The importance of nutrition was stressed by the Commission but the matter has received scant attention. The Government of India have recently appointed an economist to prepare a scheme for sickness insurance for industrial workers, and a committee has now been set up to collect all the facts regarding the living conditions, etc. of labour. But, on the whole, the benefits from all social services taken together which the Indian industrial worker receives are but slight as compared to those which his compeer in the industrially advanced countries in the West receives. A still greater anomaly arises out of the fact that while the workers in factories, mills, mines, docks, plantations have to a greater or less extent benefited by these welfare measures, the agricultural labourers making altogether 33 million, have been left without any legal protection or relief. Illiterate, unorganised and unable to pull their own weight owing to their vastness of number, they sell their honest labour for a bare subsistence, working without any fixity of hours or standard of payment. Countries like the U.S.A., U.K., Australia as also several European States have considerably advanced in securing for the agricultural labourer a minimum wage, overtime allowance, workmen's compensation and such other important provisions which in India are the sole privilege of the urban worker. We have yet to realise that the efficiency of the average land-worker cannot be expected to improve unless his welfare receives attention from the State at least as much as that of the industrial worker.

THE PROBLEM OF FUNDS

The paucity of Social Services in India is reflected in the small expenditure of the Central and Provincial Governments in India on these items. The following table of expenditure on some of the social services incurred by the Central and Provincial Governments further shows the inadequacy of funds spent by the Government :—

(Rs. in lakhs)

	Educational (a)	Medical.	Public Health.
1937-38	11,92·7	875·1	189·1
1938-39	12,44·1	888·1	186·6
1939-40	13,08·8	401·7	186·5
Per capita expenditure in 1939-40 (Rs.)	0-7-0	0-2-2	0-1-0

(a) Including expenditure from the District and Municipal funds, fees and other sources, the total expenditure during these years amounted to Rs. 26·9 crores, Rs. 27·8 crores and Rs. 29·1 crores respectively.

With expenditure at such low levels, only the immediate problems receive attention while the long-range ones are completely lost sight of. Great Britain spends on Education 18.2 per cent. of its revenue as against India's expenditure of 8.4 per cent.; on Medicine and Health Britain spends 22.7 per cent. while the expenditure on this head in India is only 8.4 per cent. of the revenue. The more serious anomaly in expenditure on social services arises from the fact that a major part of the benefit goes to the urban people though it is the rural masses who contribute more to the Treasury of the Government. Adequate statistics showing the relative benefit derived by rural and urban parts are not available ; in respect of Public Health, however, figures regarding the amount spent from the Government funds on hospitals and dispensaries in the three Presidencies, Madras, Bombay and Bengal in 1939 show that a disproportionately large part went to the cities. Thus, the city of Madras with less than 15 per cent. of the total population of the Province got nearly 33 per cent. of the total amount spent ; Bombay City with 15 lakhs of population received as much as Rs. 14 lakhs while the 193 lakhs of people in the villages had to be content with only Rs. 11 lakhs ; in Bengal, out of the total amount of Rs. 26 lakhs, nearly Rs. 20 lakhs were spent on hospitals and dispensaries in Calcutta alone. In 1939, out of the 24 maternity and child welfare centres maintained by the Government in the country, only 10 were in rural areas. Even in respect of education, the same disproportionate attention to urban areas is in evidence. In 1939-40, for instance, the total expenditure on rural education amounted to only Rs. 10.7 crores or 37 per cent. of the total as against Rs. 18.4 crores in urban areas. While a part of this sad neglect of rural welfare is due to the poverty of the rural local bodies, the Government of India cannot escape the ultimate responsibility for the same.

In India, the Government has not denied the need for greater expenditure on social services, but it has always complained of lack of funds. This difficulty, however, is a consequence of undue preponderance of expenditure on Security Services, failure to effect economy in the cost of administration, and the unsatisfactory distribution of the sources of revenue between the Centre and the Provinces. The Popular Ministries formed under the new Constitution, however, made a good beginning by gradually reducing the proportion of expenditure on Security Services to total expenditure, by bringing down certain expenditures on administration and by tapping

new sources of revenue. As a result, the expenditure on Social Services went up from Rs. 19.5 crores in 1936-37 to Rs. 23.8 crores in 1939-40. This increase of Rs. 4.3 crores within a period of three years compares with a similar increase of Rs. 5.1 crores during a period of 14 years between 1921-22 and 1935-36.* But this work of extending and improving the social services came to an abrupt end owing to the resignation of these ministries and the outbreak of the war came in the way of any substantial results being achieved. The recent withdrawal of prohibition in Madras and its relaxation elsewhere may be further noted here as indicating how some of the welfare work of the responsible Ministries has suffered during recent years.

Social Services in Britain

We cannot resist the temptation of giving here a quotation, though lengthy, from Julian Huxley which details the scope of Social Services in Britain :

"But the best way to visualise what the British social services are doing today is to describe their effect in terms of an ordinary man's life in the years just before the war. Think of a typical wage-earner—a young married man doing semi-skilled work in a factory, or a bus driver, or a shop assistant. He lives in a town where the public authorities see to it that drainage and street clearing are so efficient that most people never think about them at all, where the borough council removes refuse, where he is protected against disease and short measure by food and shop inspectors. If he is lucky, he has secured a house on a municipal housing estate, which means that public money has been expended to allow of low rents. If he falls sick, under our National Health Insurance system he gets free treatment and free medicines from his panel doctor; and if his illness lasts any length of time, he receives cash payments too.

"Meanwhile his wife is expecting a baby. If she is wise, she will go to one of the ante-natal clinics provided by the local authority, where she can be properly examined and advised, and, if necessary, given suitable foods. When the time comes for the baby to be born, she has a choice between calling in a trained midwife belonging to the public midwifery service, or going into a public maternity ward at a hospital. Later, a health visitor will come to her home to advise on the baby's health and care, and the mother will almost certainly have the chance of attending an infant welfare centre, where the baby will be regularly weighed, examined, treated for minor ailments, and milk provided if need be. Later, if she is lucky, she will have access to one of the nursery schools for children under 5, though there are all too few of these at present. In any case, when the little boy is 5, he will begin his compulsory schooling. During his time at an elementary school he will enjoy the advantages of the school medical system. This means thorough medical examination and treatment, free or at a nominal charge, for minor illness, defects of teeth and eyes, adenoids and tonsils. In many cases he will also be seen by one of the members of a voluntary care committee, who makes it their to follow up the school medical examination by visits to the child's home.

"Meanwhile let us suppose that there has been a slump in trade, and the father has been thrown out of work. While employed he will have been paying his tenpence a week to the Unemployment Insurance Scheme. Now he gets the benefit—thirty shillings a week for himself and an extra four shillings for his boy.

"Unfortunately the depression continues, and so does his unemployment. After six months (or longer if he has been very regular in paying his weekly contributions) his right to employment insurance benefit lapses. But there is a second

* Vakil and Patel: *Op cit.*, pp. 49-53.

line of defence: he can apply for unemployment assistance. This is not a right, but a form of relief, and is assessed in relation to need. An official of the Assistance Board will investigate the man's circumstances, and assess the grant accordingly. This "Means Test," as it is usually called, has caused much friction and ill-feeling, and an Act has just been passed in Parliament which will get rid of a good deal of the trouble. Meanwhile, as unemployment benefits, and usually unemployment assistance, are considerably less than normal wages, the family's standard of living inevitably goes down somewhat. But the school medical service sees to it that if the child's health is likely to suffer, he will be given free milk and, in most areas, a free midday meal. Even boots and clothing will be provided free for the children of really needy parents.

"All the time that he has been out of work, the father was registered at his local Employment Exchange, and, being an enterprising fellow, he has also gone to a Ministry of Labour Unemployed Training Centre to be trained for another occupation and at last he gets the offer of a job. Unfortunately the region where he lives has become a chronically depressed area and the job is in another part of the country. But he can get the family's railway fare paid there, and a grant towards the cost of removal —and so he moves off to take up active work again elsewhere.

"Unfortunately his wife has developed tuberculosis. Luckily he now finds himself in a region where the local authority maintains sanatoria, and after six months there, she recovers her health.

"The child is growing up and turns out to be an intelligent boy. So at the age of 11 he successfully takes an examination which qualifies him to go on to a secondary school till he is 16 or 17, instead of staying on in an elementary school and finishing his education at 14 or 15. His father is now earning good wages again and decides that he can manage the small fees which are payable. This turns out to be a good investment, for the lad eventually wins a scholarship which enables him to go to the University. His education there is subsidized not only by the scholarship he has earned through his ability but by Government and local grants, which make up nearly half the total income of British Universities.

"Under the various Old Age Pensions schemes, the man and his wife, when he is 65 and she 60, will draw thirty-two shillings a week, provided their resources do not exceed a stipulated amount. The social services touch his life from the cradle to the grave.

"One final point. The fears which have often been expressed that the social services would undermine people's sense of personal responsibility have proved to be quite unfounded. This is demonstrated by the fact that small savings have enormously increased during what may be called the social service period, since 1910 or thereabouts."*

Social Services and Rural Life

The above quotation illustrates the scope of good work that the State as the representative of the community as a whole can do in this sphere. Without going into the many intricate problems of finance and organisation that will arise when an attempt is made to improve the position in India, we may only mention here that the extension of social services to rural areas must be an integral part of a proper policy of agricultural improvement and village reconstruction; for, unless the two go together we shall only have a continuation of the present state of affairs which reminds us of Hobbes' characterisation of the pre-civil life of man—"poor, solitary, nasty, brutish and short."

* Julian Huxley: "Democracy Marches,"

CONCLUSION

The survey of the facts of the problem presented above brings out the picture of a rapidly increasing population faced with a static economic system, an organic part of which is a decadent and unprofitable system of agriculture, which fails not only to provide a reasonable standard of living to the people dependent on it, but also to ensure enough food supply for the population of the country as a whole. At bottom, our rural problem is the problem of the poverty of our masses and is thus linked up with the prosperity not only of agriculture but also of all our industries. These wider aspects of the question will be touched upon further on in this book. The analysis of facts presented here with reference mainly to our agricultural system reveals vital deficiencies in the organisation of our economic resources, deficiencies which express themselves in the exhaustion of the soil, the recurrence of famines, the indebtedness of the peasantry, the unemployment among the rural population and the dearth of social services and nation-building activities for the masses.

The picture as it emerges brings home not merely the importance of the problem—that should be obvious to anybody who has even a cursory idea of the general economic conditions in the country—but the *urgency* of the same, which has been further heightened by the critical food situation in Bengal and other parts of the country during the last few months. And yet, it would be an error to attempt to solve this urgent problem in terms of short-run remedies, make-shifts and palliatives ; the long-run requirements of the situation have constantly to be kept in mind if our rural economy is to be put on a sound basis.

The Government of India, the various Provincial Governments and several non-official organisations have been trying to solve some of these problems. Government activities in this sphere embrace technical improvements and research, co-operation and the finance of agriculture, and measures for dealing with certain specific evils such as sub-division and fragmentation of land, usury and other malpractices, etc. Private bodies and organisations have a socio-political programme along with the economic programme, or, they are inspired by what may broadly be termed the philanthropic motive.

It is the purpose of Part II to review these measures by Governments and by other public bodies with a view to seeing their full significance in a total perspective and to deduce therefrom the lines of further all-round progress, which, as the facts brought together here reveal, must be the aim of any well-conceived policy of rehabilitating our rural economy.

PART II

Reform Policies and Measures

Official and Non-official

CHAPTER VI

THE EVOLUTION OF INDIAN AGRICULTURAL POLICY

EARLY BRITISH POLICY

It is hardly necessary for us to trace the conditions of agriculture in India from the early days of the East India Company's rule, or, for the matter of that, even from 1858, the date of assumption of responsibility by the British Crown for the good government of this vast sub-continent. (That the East India Company was mainly interested in trade, that the early British officials in India could, by the very nature of the case, have but little comprehension of their responsibilities in undertaking the governance of such vast country with a variety of traditions, needs and cultures will hardly be doubted. It is also clear that the main objective of British policy in India after the tragic happenings of 1858 was administrative consolidation, and that such measures of reform as English education, or the suppression of certain customs such as *sati*, or the introduction of a measure of local self-government that were undertaken were motivated chiefly by the desire to found in India a more stable administrative system in which Indians themselves would help to maintain British power. It is for this reason also that in regard to major economic issues such as land tenures and assessment of land revenue the British officials tried as far as possible to perpetuate the old existing systems no doubt as they understood them, or with such small changes as were inevitable. There were, indeed, a few among British thinkers and reformers who had an idea that they had a ' mission ' in this country, the mission ' to civilise the native,' and this accounts for a certain ' tolerance,' a certain ' paternal ' attitude to native social and economic habits, customs and practices. But that was about all. There was certainly no clear policy of developing India's resources, so as to ameliorate the economic condition of the people.) Sir Thomas Munro wrote in 1817 in a minute he sent to Lord Hastings : " The effect of this state of things is observable in all the British provinces, whose inhabitants are certainly the most abject race in India. No elevation of character can be expected among men, who, in the military line, cannot attain to any rank above that of subedar, where they are as much below an ensign as an ensign is below the Commander-in-Chief, and who, in the civil line, can hope for nothing beyond some petty judicial or revenue office, in which they may, by corrupt means, make up for their slender salary."* The years of the nineteenth century that passed since this

* Thompson and Garratt : " Rise and Fulfilment of British Rule in India," p. 658.

minute was written have been a tragic corroboration of this grim prophecy ; for, although something was done thereafter to associate Indians in the work of Government, the great task of developing in this country an economic system in consonance not only with the needs of the people but also with the modern developments in science and technology proved too difficult to accomplishment, so that while the impact of western industrialism and the competitive order destroyed the elements of stability in the economic system, nothing vital, nothing new, nothing full of promise of growth was substituted in their place. The result has been the great, even phenomenal, poverty of the Indian people in the face of an expanding world system of prosperity and economic well-being.

Progress in Other Countries

It would of course be a mistake to try to idealise the economic conditions in India before the advent of British rule. We have always had our share of troubles : invasions, plunders, and famines ; lack of communication and transport ; conservatism, ignorance and superstition ; evil social customs, political misrule, and all the rest of it. The point may, however, be mentioned, that we were not alone in this suffering. Europe was, if not worse, certainly not better. Man's life all over the world, was an uncertain, insecure, and hand-to-mouth existence. Only, during the nineteenth century, first England, and then France, Germany and America in turn moved into action and achieved substantial economic results. In the early days of the twentieth century even an oriental country like Japan followed the trail, and Russia achieved almost a miracle of economic regeneration. India was left out in the cold.

Traditional Agriculture in India

There is also the point that whereas economic life in India in the eighteenth and early nineteenth century was static, India had evolved a socio-economic structure quite capable of maintaining some kind of a static equilibrium. Population growth was slow ; the pressure on the land was not yet felt ; Indian agriculture had settled down to a customary routine based on the practical experience of generations of chrewd, though not educated, farmers ; in the Indian caste system, everyone and everything had a place, however humble ; and, above all, the old village economy, based on the idea of self-sufficiency* was

* "The cultivator is thus a member of a definitely organised community, which has, as far back as the history of social organisation in India can be traced, been dependent on itself for the, means of living and, to a very large extent, for its government. As a result, the typical cultivator is within the sphere of his experience, self-reliant and *both his methods of cultivation and his social organisation exhibit that settled order which is characteristic of all countries in which the cultivating peasant has long lived in, and closely adapted himself to, the conditions of a particular environment.*" Royal Commission on Agriculture, p. 479. (Italics ours.)

a veritable asset for the masses who could remain largely unaffected by political cataclysms. Not that the standard of life was high, but it was not unsatisfactory, not so uncertain as to lead to physical deterioration and moral decay. India had a fame in the outside world for her handicrafts and artistic products ; her ships crossed the far-off seas ; she had a well-developed industrial structure integrated with her agricultural economy. In his masterly minute to the Indian Industrial Commission's Report, Pandit Malaviya dwelt on the high state of industrial development in India at a time when the west of Europe, the birth-place of modern civilization, was still in a primitive stage.* The advent of modern industrialism destroyed the self-sufficiency of the village ; the old towns, the centres of handicrafts and manufactures, decayed ; the old order based on status and custom gave place to a new one based on contract and the cash nexus with a centralised system of administration ; the old stereo-typed social system received a severe battering in the process. The economic transition in India, as our economists have always emphasized, had features of early capitalism, without its redeeming advantages. While the old system had to crumble, nothing new could be put into its place, mainly because of the policy of drift into which the Government of the country had landed itself.

THE BEGINNINGS OF AGRICULTURAL POLICY

The problem of the economic condition of the masses drew the attention of the Government when after the seventies of the last century, there was a series of famines in the country. It was then felt that something had to be done to place Indian agriculture on a sounder footing. The Famine Commissions of 1880, 1898 and 1901, the Irrigation Commission of 1903 and the Committee on Co-operation of 1915 made several excellent suggestions for the improvement of agriculture and for the promotion of the welfare and prosperity of the rural population.

The first proposal for the creation of a special Agricultural Department in India came from the Commission appointed after the great famine of Bengal and Orissa in 1866. This proposal was considered ' premature.' In 1869, the cotton interests in England which have had, in the words of the Linlithgow Commission on Agriculture, " considerable influence in shaping the agricultural policy of the Government of India," urged the Secretary of State to prevail upon the Government of India to undertake measures for the improvement

* Minute of Dissent, Industrial Commission Report, pp. 296-7.

of cotton, and to set up a separate Department of Agriculture in each province. Little real progress was, however, made until 1880 when the Report of the Famine Commission made a thorough enquiry into the problem and made extensive suggestions for agricultural improvement. Irrigation and the improvement and extension of the means of communication were among the main rcommendations of the Commission, for in this manner, the severity of the famines could be greatly diminished. The Commission also recommended that industries should be developed to absorb the surplus population on the land. They referred to the unfortunate circumstance that agriculture formed almost the sole occupation of the mass of the population, and pointed out that " no remedy for present evils can be complete which does not include the introduction of a diversity of occupations." Among the other proposals of the Commission were : (i) the revival of the Department of Agriculture of the Government of India to be entrusted with " the duty of collecting experience of past famines and of undertaking definite and permanent charge of the administration of famine relief "; (ii) the simultaneous formation in all provinces of Departments of Agriculture with a large subordinate establishment working under each Director of Agriculture ; (iii) the distribution of loans to farmers by Government on the security of land; (iv) the appointment of special courts to examine rural debts with a view to equitable reduction and payment by instalments. As the Royal Commission Report mildly puts it : " The Government of India took no immediate action on the proposals . . . ", and " the next ten years were spent mainly in conferences and in investigating the position in the provinces with a view to discovering the lines of development best suited to their needs."*

Dr. Volcker's Report

In 1889, Dr. J. A. Voelcker, Consulting Chemist to the Royal Agricultural Society, was sent out to India " to advise upon the best course to be adopted in order to apply the teachings of agricultural chemistry to Indian agriculture and to effect improvements in it." The Report is a masterly document which has left its impress on all subsequent reports dealing with agriculture in India and the Royal Commission of 1928 has also drawn largely on it. Dr. Voelcker starts, first of all, by exploding the current myth that Indian Agriculture was as a whole primitive and backward.† " At his best the Indian raiyat or cultivator is quite as good as, and, in some respects, the

* Report, pp. 17-18.
† Report on the Improvement of Indian Agriculture, p. 11.

superior of the average British farmer, whilst at his worst it can only be said that this state is brought about largely by an absence of facilities for improvement which is probably unequalled in any other country . . . Certain it is that I, at least, have never seen a more perfect picture of careful cultivation, combined with hard labour, perseverance, and fertility of resource than I have seen at many of the halting places in my tour."

The differences in agricultural conditions in India were accountable, in the opinion of Dr. Voelcker, to three factors :

I. Difference *inherent in the people themselves* as cultivating classes ; for instance, the fact that farmers from certain castes and races are not good at farming while those belonging to others are good cultivators ;

II. Differences *arising from purely external surroundings* such as

(*a*) natural causes, like climate, soil, facilities for water, manure, wood, grazing, etc. ;

(*b*) economical or political conditions like the relative ease or difficulty of living, paucity or pressure of population, etc. ;

III. Differences *arising from want of knowledge*, for instance, the existence of diversity of agricultural practices in different parts of the country.

The Report quotes a number of examples to illustrate these differences, so as to indicate in each case the possibilities of improvement and the agencies through which these improvements could be brought about. It is evident that some of these are rooted in the physical and social environment, and are, therefore, difficult of improvement ; others are more easily amenable to reform. Without going into further details, it may be said that an analysis of agricultural conditions and problems along these lines at once gives us the clue as to the directions and the manner in which the Government as well as private agencies have to apply themselves. The Report discusses in turn soils, manures, forestry, animal husbandry, seed improvements, rural education, research, the organisation of statistics, etc., and on each one of these heads, the suggestions offered have a value even today.

Dr. Voelcker refers to " a pretty general belief that the soil *is* becoming less productive " and comments in this context on the lack of manures and the " export of oil-seeds, cotton, and other products,

besides an increasing one of wheat, all of which remove a considerable amount of the soil constituents."* On the importance of this problem one may again quote the Report : " Improvements in the system of land tenure, improvement of the land by expenditure of public and private capital on it and similar measures may alleviate the condition of the Indian cultivator, but they will not give him larger crops and they will not provide the food that the people *must* have to live upon. For this the *soil* itself must be looked to, as it alone can produce the crops, and manure alone can enable it to bring forth the necessary increment."† The remedies suggested are irrigation by canals, tanks and wells, and the use of manures.

As to manures, it is pointed out that the Indian cultivator was not ignorant of their utility, that the practice of burning cowdung was due to the absence of cheap fuel, and that it was the duty of Government to provide the people with wood for fuel. " More wood means more manure, more manures mean more crops, and more crops an increasing revenue to the State ; to the cultivator, it implies more fodder, better cattle and more manure again to ensure the future fertility of the soil."‡ From this follows the need for a new policy in regard to forests and for the promotion of arboriculture. What was wanted was a change of outlook on the part of the Forest Department. As the Report puts it : " The results must not be gauged by financial considerations alone, but by the benefits conferred on the agricultural population, the keeping up of the soil's fertility and the maintaining of the Land Revenue to the State."

Among " the economical and political conditions " which account for the low productivity of Indian agriculture, the Report mentions the smallness of holdings, want of capital, rural indebtedness and defective land tenures. These are, however, not discussed in detail, as " I do not feel myself qualified to treat of them."§ But the Report places due emphasis on the need for detailed scientific investigations regarding agricultural practices in India, cautions against the belief that western knowledge could simply be grafted on to Indian practices, and argues the case for general as well as agricultural education.

AGRICULTURAL POLICY UPTO 1905

At the suggestion of the Agricultural Conference held in 1890 when Dr. Voelcker was here, Dr. J. W. Leather was appointed Agricultural Chemist to the Government of India. The need for deve-

* Report, p. 39.
† *Ibid.*, 41-42 (Italics in the original).
‡ *Ibid*, p. 137.
§ *Ibid*, p. 289.

lopment in other directions was also felt soon. In 1901, an Inspector-General of Agriculture, and a Mycologist, and, in 1903, an Entomologist were appointed. About this time Mr. Henry Phipps of Chicago offered a donation of £30,000 to Lord Curzon to be applied to some object of public utility, preferably connected with scientific research. This donation was used for the establishment of the Pusa Research Institute. In the meanwhile, there was a series of draughts between 1895 and 1899. The famine of 1899 was "the greatest in extent and intensity which India has experienced in the last 200 years." The famine relief organization in the provinces was, however, found inadequate.* The Famine Commission of 1901 found that "the steady application to agricultural problems of expert research is the crying necessity of the time," and recommended (i) a strengthening of the staff of Agricultural Departments in all provinces, (ii) further legislation on the lines of the Punjab Alienation of Land Act to restrict the transfer of land, and (iii) the introduction of co-operative credit societies along German lines. The Co-operative Societies Act, 1904, and the expansion of the Imperial and Provincial Agricultural Departments in 1905 were attempts to implement these recommendations. On the whole, then, by 1905, there was a certain desire on the part of Government to promote agricultural improvements. The absence of precise data on which to work was, however, a main handicap. Moreover, it cannot be said that the seriousness of the problem had as yet been realised by the authorities. Various Provincial Governments had also made isolated attempts to promote agricultural research and improvement, but, to quote the Royal Commission on Agriculture, "the magnitude of the problem which confronted them was so great that it was difficult for them to get down to essentials and they had neither the trained staff nor the organisation to carry into effect such recommendations as they were in a position to make."† In the meanwhile, ten retired British officials and R. C. Dutt addressed a memorial to Lord George Hamilton, the Secretary of State, in which they argued that the malady of Indian agriculture was more deep-rooted, and that at the back of it all was the land revenue system.‡ This memorial evoked by way of reply Lord Curzon's famous resolution of January, 1902, trying to vindicate Government's land revenue

* *Cf.* "The Commission of 1901 emphasised the lack of real preparation. 'In no province were well-considered programmes of public or village works ready at the beginning of the famine.' The system of grading labour was too complicated for a wide-spread famine, and was generally abandoned. In some provinces, notably Bombay, there was a tendency to defer action until too late and to be too economical. The scale of relief had an undoubted connection with famine mortality, whether that mortality was due to starvation or to the indirect results of famine conditions." Thomson and Garratt, *op cit.*, p. 563.

† Report, p. 29.

‡ See Thompson and Garratt, *op. cit.*, p. 565.

policy. The demands made in the memorial were turned down, but this criticism of Government policy did hasten the introduction of reforms.* The passing of the Co-operative Societies Act of 1904, the expansion of the Imperial and Provincial Departments of Agriculture in 1905, the constitution of the Indian Agricultural Service in 1906, the rapid expansion of irrigation in the course of the next fifteen years—all these are proof of the fact that the problem of Indian agriculture was now assuming a new aspect, that the emphasis was changing from *palliatives* like famine relief, takavi grants and revenue remissions to more positive measures. And yet, on the whole, the total impression made by these measures on our rural economy was quite small.

Progress Since 1919

Under the reforms of 1919, agriculture, along with co-operation, local self-government, public health and sanitation became a transferred subject, the Central Government confining itself to the management and supervision of central agencies and institutions for research. The Central Government still had, under the Devolution Rules, certain powers of superintendence, direction and control in regard to transferred subjects, but it was no longer permissible " to incur expenditure from central revenues on Provincial subjects " except on agricultural research and the training of research workers in central institutes. The Provincial Ministries under Dyarchy had little real initiative, as finance was not under their control, with the result that beyond a considerable extension of irrigation, little progress in agricultural improvement was achieved in this period. The Government of India Act of 1935 provided for Provincial Autonomy, and under this arrangement which came into force from 1937 (apart from the suspension of the same in some Provinces in 1939), the division of functions and responsibilities as between the Centre and the Provinces has diminished further the Centre's responsibility in regard to this question. The outbreak of the present war has raised several important problems, which are of vital significance not only in the long run but also from the point of view of the immediate needs of the country and even the effective conduct of the war. Among these is the problem of food supply, which has attracted so much attention of late.

The Royal Commission and After

Before, however, we go on to these recent developments, it is necessary to review briefly the analysis and recommendations of the

* *Ibid.*

Royal Commission on Agriculture in India, appointed in 1926, which submitted its Report in 1928. This Report is a comprehensive survey of the various problems of agriculture in India, and has rightly become the starting point of all further discussions on the subject. The Commission was appointed " to examine and report on the present conditions of agriculture and rural economy in British India and to make recommendations for the improvement of agriculture and the promotion of the welfare and prosperity of the rural population and in particular to investigate :—

" (*a*) the measures now being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education : for the compilation of agricultural statistics ; for the introduction of new and better crops and for improvement in agricultural practice, dairy farming and the breeding of stock ;

" (*b*) the existing methods of transport and marketing of agricultural produce and stock ;

" (*c*) the methods by which agricultural operations are financed and credit afforded to agriculturists ;

" (*d*) the main factors affecting the rural prosperity and welfare of the agricultural population ; and to make recommendations."

These terms of reference seem wide enough, but unfortunately the whole problem of land revenue and land tenures was excluded from the scope of the Commission's work. This lacuna detracts considerably from the value of this otherwise comprehensive study, for how can we at all think of " the promotion of the welfare and prosperity of the rural population " without examining, first of all, the basic land system of the country, the question of the distribution of ownership of land, the terms on which it is held or cultivated by the different rural classes, the relation of the cultivator to the landlord and to the Government and the whole system of land taxation ? This, however, is typical of Government's policy and manner of doing things in this country by bits and doing them rather late. However, within this limitation, the Report has valuable suggestions to make on every topic it discusses—suggestions which have been the basis of agricultural policy since 1928. " The Commission recognised clearly," says the Russell Report on the work of the Imperial Council of Agricultural Research, 1939, " that the problem of improving Indian agriculture was really the problem of improving Indian village life, and that this must be studied as a whole."

One of the most important recommendations of this Commission was the creation of the Imperial Council of Agricultural Research "to promote, guide and co-ordinate agricultural research throughout India, and to link it up with agricultural research in other parts of the British Empire and in foreign countries." There had hitherto been no link between the activities of the various Provincial Departments of Agriculture. The sphere of activity which such departments could undertake must always be limited on account of the inevitable limitations of provinces in regard to finance and availability of first class technical men. The Imperial Council of Agricultural Research could act as a clearing house for information not only in regard to research but also in regard to agricultural and veterinary matters generally. It could remain in close touch with Provincial Governments and Departments of Agriculture, and enlist the support and co-operation of Universities in the furtherance of agricultural research, thus bringing about a closer contact between the Universities and the Agricultural Departments.

The recommendations of the Commission on sub-division and fragmentation of holdings, improvements of livestock, irrigation, marketing, co-operation, rural education and rural reconstruction in general aim at bringing about "greater efficiency throughout the whole field of agricultural production," so as "to render the business of farming more profitable to the cultivator." The Commission emphasize the urgency of widening the outlook of the cultivator himself so that he may become not only a better instrument of production but also a better man. At the same time, they also define clearly the responsibility of the Government. "We have no hesitation," the Report observes in its concluding section,* "in affirming that the responsibility for initiating the steps required to effect this improvement rests with Government" ; that "the rural problem should be attacked as a whole, and at all points simultaneously" ; that "the responsibility for framing policy, and for combining the activities of two or more departments in order to give effect to their policy, must remain that of Government and Government alone" ; but that, at the same time, "success on a large scale can be rendered permanent only if the sympathy, interest and active support of the general public can be enlisted." All this is an admirable enunciation of the ideal of a new policy, but, evidently, the actual policy of the Central as well as Provincial Governments in this regard must be judged by

* Report, pp. 672-3.

their success or failure to show substantial results during the next decade in respect of which, in the light of the above remarks, one would naturally have great expectations.

The Depression

As things happened, however, the year 1929 saw the onset of the Great Depression which affected agricultural countries more adversely than industrial countries, though the latter also suffered serious dislocation. While all commodities and countries were affected by this, the effects varied widely. Industrial production, being on a larger scale and more elastic, could adjust itself relatively more easily to the new conditions. The fall in prices of industrial commodities was, therefore, less and the recovery came earlier. Agriculture being less organised, agricultural production was maintained almost intact, and the fall in prices was greater. The following two statements showing the decrease in industrial and agricultural production during the depression years and the fall in their relative prices will reveal the truth of his remark :

World Agricultural and Non-Agricultural Production.

(Average annual production in 1925-29=100)

1929		1930		1931		1932	
A.P.	N.A.P.	A.P.	N.A.P.	A.P.	N.A.P.	A.P.	N.A.P.
103	115	105	106	103	91	102	79
1933		**1934**		**1935**		**1936**	
A.P.	N.A.P.	A.P.	N.A.P.	A.P.	N.A.P.	A.P.	N.A.P.
104	86	104	98	104	107	107	121

A.P.—Agricultural products. N.A.P.—Non-agricultural products.

Price Movements of Raw Materials and of Manufactured Goods.

(1929=100)

Country.		1932		1933		1934		1935		1936
		June	Dec.	June	Dec.	June	Dec.	June	Dec.	June
Belgium*	A	48	46	43	44	43	42	53	62	63
	B	69	67	65	65	62	59	64	69	69
Canada	A	55	52	59	60	66	66	67	69	68
	B	75	73	75	77	78	78	78	78	77†
Germany	A	66	66	68	68	69	70	69	71	71
	B	75	72	71	72	73	75	76	76	77
Italy	A	52	53	55	52	50	51	61	...	...
	B	69	70	64	64	61	61	67	...	...
Poland	A	62	63	58	62	59	56	55	55	56
	B	74	69	64	63	63	61	60	59	58
Sweden	A	81	81	79	79	79	84	84	86	84
	B	76	77	75	80	80	82	81	82	83
United Kingdom‡ ...	A	63	71	81	89	89	84	88	94	96
	B	91	93	94	94	94	95	95	96	98
U. S. A.	A	55	53	58	63	63	75	78	80	79
	B	78	71	72	78	78	83	85	96	85§

A stands for raw materials, and B for manufactured goods.

* Figures for February and October instead of June and December.

† May 1936. ‡ Base 1930=100. § April 1936.

The greater fall in the prices of agricultural products meant a correspondingly greater strain on agricultural countries. Many factors contributed to further increase this strain. This rise in prices of agricultural commodities after the last war had not been so great as that in industrial products. Most of the agricultural countries were debtor countries, which had borrowed heavily in the past at high rates of interest and the payment of interest charges necessitated a favourable balance of trade under adverse conditions. The need for something drastic to check this state of affairs was apparent. Even in the highly industrialised countries, unemployment assumed serious proportions. Most countries, therefore, set aside their traditions of *laissez faire,* and took steps to stop the fall in prices and shorten the period and intensity of the depression. The measures taken varied widely according to the characteristics of each country's economy, but broadly speaking they could be classified under the following heads :

(*a*) *Measures to improve the Balance of Trade.*

In order to maintain or increase their balance of trade, Governments took various measures, on the one hand, to encourage exports, and, on the other, to restrict imports. The duties on imports were increased ; quotas were fixed in respect of some imports ; trade agreements were entered into between various countries, and in a few cases exports were subsidised and even dumped. The currency depreciation indulged in by various countries served the same purpose.

(*b*) *Measures aiming at Reduction in Costs.*

In order to obviate the necessity of reducing wages so as to bring about an equilibrium between prices and costs, steps were taken to cheapen production in other ways. Cheaper and better transport facilities were provided ; the spreads between wholesale and retail prices and the middlemen's profits were decreased ; credit was provided by the State on cheaper terms ; and, in general, efforts were made to stimulate technical improvement.

(*c*) *Measures to obtain Higher Prices.*

Various restrictive measures were adopted to raise the level of prices. Acts were passed by which the producers were encouraged or even compelled to restrict their production and measures were adopted to hold off surplus stock from the market. This course was expected to have a specially favourable effect on agriculture because of the inelastic demand for most of its products. Storing facilities and advances were provided so as to relieve the farmer from the necessity of selling his products at an unfavourable rate. The market for these

products was sought to be divided into watertight compartments so as to enable the producer to take advantage of consumers who were prepared to pay more. In some cases, the State itself bought over a major part or even the whole of the surplus. The exchange rate was lowered in most of the countries to prevent the internal economy from feeling the full blast of world economic forces. In a large number of cases, the Governments gave subsidies to the producers to help them out of this calamity. In Great Britain minimum prices were guaranteed for several products, and the State paid the difference between the guaranteed price and the actual price realised in the market. The most notable of these cases was wheat, where the scheme was financed by a tax on the consumption of whole wheat. Similar schemes were also adopted in the U.S.A. and other countries.

(*d*) *Monetary Policy.*

In addition to these measures an attempt was made to stimulate investment through monetary policy and an extensive programme of public works. This was done even in an ' orthodox ' country like the U.K., whereas in U.S.A. President Roosevelt's New Deal aimed at evolving a planned economy under capitalism.

India and the Depression

In India the depression had very adverse effects on the entire population. As in other countries the prices of farm products fell more than those of industrial products as shown below :—

Index Numbers of Wholesale Prices in Calcutta

(July 1914 = 100)

(Figures in brackets indicate percentage decline on the basis of September, 1929)

—	Sep. 1929	Dec. 1930	Dec. 1931	Dec. 1932	Dec. 1933	Dec. 1934
Rice	124	93 (25)	74 (40)	56 (55)	74 (40)	66 (47)
Wheat	135	72 (47)	86 (36)	89 (34)	73 (46)	74 (45)
Tea	129	115 (11)	68 (47)	57 (56)	130 ...	109 (16)
Oilseeds...	175	99 (43)	80 (54)	78 (55)	77 (56)	100 (43)
Jute raw	90	45 (50)	58 (36)	38 (58)	38 (58)	44 (51)
Cotton, raw	146	69 (53)	97 (34)	89 (39)	68 (53)	80 (45)
Hides and skins	109	79 (28)	61 (44)	59 (46)	62 (43)	49 (55)
Jute, manufactured ...	122	74 (39)	87 (29)	70 (43)	75 (39)	76 (38)
Cotton, manufactured ...	161	125 (22)	121 (25)	112 (30)	114 (29)	119 (26)
Metals	130	109 (16)	110 (15)	104 (20)	101 (22)	99 (24)
Sugar	164	128 (22)	147 (10)	139 (15)	124 (24)	122 (26)
All commodities	143	100 (30)	98 (31)	88 (38)	89 (38)	88 (38)

This disparity between the fall in prices of agricultural products and in those of finished goods is also reflected in the price levels of our exports and imports, which consist mainly of raw materials and food products, and manufactured goods respectively.

Prices Level of Exports and Imports.

(1927-28 = 100)

	Exports	Imports
1928—29	97·5	96·4
1929—30	90·2	93·2
1930—31	71·5	80·0
1931—32	59·2	71·7
1932—33	55·3	65·2
1933—34	53·5	63·5

As a result of this catastrophic fall in prices of agricultural products, the gross money income of the farmer is estimated to have declined by about 50 per cent. in 1933-34, as compared to that in 1929-30. According to the estimate made in Review of the Trade of India, the value of principal crops in British India declined from Rs. 10,21 crores in 1928-29 to Rs. 4,74 crores in 1933-34—a fall of nearly 53.6 per cent. This was not accompanied by a similar fall in the costs incurred by the agriculturist, for, while some elements in such costs are elastic, others such as interest charges and land revenue could not be brought down. The net money income of the farmer must, therefore, have fallen by more than 50 per cent. Suspensions or remissions of land revenue were granted on a considerable scale, but they came late and were, on the whole, inadequate to meet the needs of the situation. The payment of Government dues absorbed an increasing proportion of the farmer's depressed income. These years thus lowered his standard of living and further increased his debts.

Government Measures in India

The Government of India took its ground on the stand that the depression was due to world causes so that little could be done to counteract it. While other countries followed an expansionist policy, they adhered to the 'orthodox' principles of currency and public finance, and concentrated their energies on balancing the budgets and maintaining the exchange ratio. No systematic steps were taken either to increase exports or to decrease imports, the only important exception being the imposition of a protective duty on wheat and wheat flour and the Indo-Japanese Pact of 1934. The Ottawa Pact introducing the principle of Imperial preference must be regarded more as a concession to Imperial Policy than as an effort to improve export trade. The Mody-Lees Pact was in the nature of a political gesture of goodwill to Lancashire interests. The de-linking of the

rupee with gold was only the result of a desire to remain in the sterling bloc, and brought little benefit as it was followed by a linking of the rupee to sterling at the old rate. Most of the countries were by that time off gold and had already depreciated their currencies. If the ratio had been lowered in relation to sterling as in the case of other countries, or if the rupee had been left free to find its own level, beneficial results would have followed. The deflationary policy followed during the depression resulted in a high rate of interest in the earlier stages and an unparalleled flow of gold exports thereafter. Except in the case of tea and rubber where the International Restriction Schemes applied also to India, and in the case of jute where an effort was made to persuade cultivators to restrict cultivation, and of sugar in which case a minimum price was guaranteed to sugarcane growers in the U.P., no attempt was made either to restrict agricultural production or to hold it off the market or to subsidize producers. The fixed charges of the farmer could have been reduced by scaling down debts and lowering rates of interest or by declaring a moratorium ; but upto 1937 except in the C.P. not the least effort was made in this direction. The Marketing and the Agricultural Departments did their work at the same old speed. Expenditure on social services like health and education and on developments was curtailed. Instead of following a policy of opening more public works, the Governments restricted their expenditure on the same. The total provincial expenditure on public works declined from Rs. 872 lakhs in 1929-30 to Rs. 579 lakhs in 1932-33.

It would, on the whole, be no exaggeration to say that this period from 1928 to 1938, during which so much interest in agriculture was evinced by Government as well as by private agencies, was also the period of prolonged depression of agricultural prices and of a serious dislocation of our rural economy, as testified by the various Provincial Banking Enquiry Committees' Reports and several village studies during the period.

THE RESERVE BANK

As important as the establishment of the Imperial Council of Agricultural Research in pursuance of the Agricultural Commission's recommendations was the creation of the Agricultural Credit Department of the Reserve Bank of India in 1935 in accordance with the provisions of Section 54 of the Reserve Bank Act. Its statutory functions are : (i) " to maintain an expert staff to study all questions of agricultural credit and be available for consultation by the Central

Government, Provincial Governments, the Government of Burma, Provincial Co-operative Banks, and other banking organisations," and (ii) " to co-ordinate the operation of the Bank in connection with agricultural credit and its relations with Provincial Co-operative Banks and any other banks or organisations engaged in the business of agricultural credit." It must be said to the credit of this Department that it has not taken a narrow view of its functions, but has devoted itself to the study of wider problems of rural reconstruction also. The Department has been able to give expert advice to Agricultural, Co-operative and other Departments and it may reasonably be expected that in the time to come its research work will contribute substantially to the creation of new knowledge not merely on questions relating to agricultural credit, but on all allied questions ; for, indeed, as some of the publications of this Department have rightly pointed out, the problem to-day is not just the extension of credit facilities by the creation of new credit institutions or by the expansion of existing ones ; the problem is to make the farmer credit-worthy, to convert agriculture from a deficit to a surplus economy and thus to rehabilitate this ancient and vital industry.

Agriculture under Provincial Autonomy

We are not concerned here with the initial political and constitutional difficulties which had to be overcome during the years 1935 to 1937 to set Provincial Autonomy into operation. We may only note that the new popular ministries which came into power in 1937 were full of enthusiasm regarding agricultural improvements and rural reconstruction. They undertook an extensive programme of legislation for the conciliation of debts, regulation of interest rates, reforms in tenancy and land revenue administration, regulation of money-lending, reforms in administration, rural education and even social reform. In order to co-ordinate the activities of all the nation-building departments they created Rural Reconstruction Departments and provided increasing grants for their operations. These ministries were, however, too short-lived to see the fruition of their work. The declaration of war in September 1939 created a constitutional deadlock, and even where popular ministries continued to function, their work was interrupted on account of the other more urgent tasks connected with the war. The promising start made by the new responsible ministries was thus halted, and the new orientation of policy in respect of agriculture which we had looked forward to again eluded us and faded away into the background.

The Effects of the Present War on Agriculture

War on a modern scale implies a total mobilisation of all resources, agricultural as well as industrial, and European countries had long been preparing for a transition as soon as need arose, from a peace economy to a war economy. But we, in India, were magnificently unprepared in spite of the lessons of 1914-18, and the Government of India and the Provincial Governments set about hurriedly to introduce changes piecemeal in this or that sector of economic life as circumstances pressed. Haphazard price controls, trade controls, transport controls, industrial controls and monetary controls, have characterised Government policy since the war. For a time, the Government could not decide whether to support the claims of primary producers by not resorting to price control or to back the vocal consumers by regulating and limiting price rises and preventing profiteering. A number of Price Control Conferences met and passed resolutions. Some provinces implemented these; others wavered. The agriculturist was in the meanwhile hit hard by the slump in prices due to the loss of our continental export markets ; the Meek-Gregory Mission sent out to explore new markets in the U.S.A. only damped our hopes. The entry of Japan into the war in December 1941, created further problems. The war effort had to be accelerated. Recruitment to the army was speeded up. India was called upon to function as the supply base for the new theatres of war. Industrial production received a stimulus. The large war purchases on behalf of the Allied Governments created new demands and the loss of export markets was made up. Prices rose rapidly ; there was an increasing strain on the country's transport system ; the working of haphazard price controls stimulated hoarding and profiteering ; and we found ourselves face to face with a food crisis in the country probably unprecedented in our annals. Undoubtedly, the prices of agricultural products have risen in sympathy with the general price level, but, once again, the agriculturist has not reaped the full benefits of the same. A considerable part of the gains has undoubtedly gone into the pockets of middlemen ; the prices of the articles the farmers buy have risen more than the prices of what they have to sell. The substantial landlords and farmers have gained, but it is, to say the least, doubtful if the rural masses are on the whole better off. The continual inflation of currency has benefited a few industrialists, business men and war contractors, but such inflation must, as it always does, mean a transference of wealth from the hands of

the many to the hands of the few. It is now admitted even by British politicians that this inflation is at least partly responsible for the food crisis in Bengal. The war has, in a word, brought out to the full the consequences of a policy of drift, indifference and even apathy on the part of the authorities for generations together, so much so that, let alone any comparison of the great advances made in other countries during the last fifty years, we in this country are now hard put to it even to feed our population adequately. To our chronic malady of malnutrition has now been added the spectre of an actual deficiency of food supply. The stoppage of exports, emergency imports from Australia or Canada, the " Grow More Food " campaigns, and a few subsidies for distribution of seed, taken in hand recently, are at best only palliatives, which may alleviate the problem, but cannot solve it. Indian agriculture now demands, if it has not demanded long since, a new policy, a basic searching of the fundamentals of Government policy, and concerted action on the part of the Government private and semi-public bodies and the citizens at large interested in the larger problem of the welfare of our rural masses. The immediate problem is difficult enough, but we are concerned here more with the long-term problem.

Conclusion

This survey brings out the essential weakness of our agricultural policy which lies in the lack of any comprehensive plan. The immediate problem of relief in Bengal, Malabar, Cochin and Travancore will, let us hope, be found tractable along the lines recommended in the recent Foodgrains Committee's Report, but the problem of post-war policy will remain. Several Post-war Reconstruction Committees have been set up by Government to consider the various problems of agriculture, but hardly any progress has so far been made. Before we talk of the freedom from want, we must surely have freedom from hunger. It is certain, at any rate, that planning, in some form or the other, will characterise the economic policies of all nations in the post-war period, and it is argued, therefore, that at least this time, when the opportunity comes, we in this country shall not be found unprepared. It may only be added that success in this direction presupposes not only an adequate agricultural policy but an appropriate currency and tariff policy which will determine the general lines of development in the country.

CHAPTER VII

CROP IMPROVEMENTS AND TECHNICAL

I. Crop Improvements

Apart from general considerations of economic policy which form the necessary background for all improvements designed to increase the yield of crops, the main factors that need to be looked into in this connection are :*

(*a*) Better varieties of crops,
(*b*) Better control of pests and diseases,
(*c*) Better control of water supply for crops,
(*d*) Prevention of soil erosion,
(*e*) Better use of manures and fertilisers,
(*f*) Better tools and implements,
(*g*) Better systems of cropping, in particular better rotations and the use of more fodder crops with a view to obtaining more farmyard manure.

(*a*) As regards better varieties of crops, considerable amount of work has been done in this country in regard to cash crops. As much as 80 per cent. of the total area sown under sugarcane and as much as 50 per cent. under jute falls under the category of area under improved seed. But, as already noted, progress in respect of food and other crops is not so satisfactory.† The great handicap is the difficulty of obtaining adequate supplies of good seed, and in this connection the Russell Report recommends that the Imperial Council of Agricultural Research "should consider the advisability of setting up some central organisation in each province for the multiplication and distribution of seed of approved varieties." Such an organisation should, we feel, prove of high value if it establishes contacts with co-operative societies and village *panchayats* through which the necessary propaganda among the cultivators could be done.

From the point of view of the nutritional needs of the country, much more than has hitherto been done is necessary in regard to food crops. Whereas for cash crops for exports, the criterion is bound to be saleability in foreign markets—assuming, of course, that full use is made in each case of the local product for local manufacture—here in the case of food crops the more essential criterion is nutritive value. The recent appointment of a nutrition expert "to act as liaison officer between the work of the nutrition laboratory at Coonoor and

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* Russell Report, pp. 50 ff.
† *Vide* Chapter III

the Agricultural Research Stations at Delhi and the Provinces" is a step in the right direction. The Russell Report, commenting on this, observes : "It is particularly important that the work on human nutrition should not become diffuse ; everything else should be subordinated to the two vital problems : what are the deficiencies in the village dietary and how best can they be overcome ?"* The supreme importance of this work hardly needs more emphasis. Of equal importance in this respect is more work in connection with the growing of vegetables and fruits. These are not consumed in India in adequate quantities, mostly because of the high prices for them beyond the reach of the average man. Better facilities of transport and better preservation facilities should be of high value here. There is at present considerable confusion regarding varieties, some of which have different names in different places. This needs to be cleared up. Methods of propaganda have to be perfected and standardised, and above all, supplies of grafted and budded planning material true to type must be organised for distribution. Special attention must be paid to cheap varieties suitable for the needs of villagers. Suitable subsidiary industries could also be developed, like fruit canning and the making of jams and pickles which would eliminate a great deal of waste.

(*b*) Control of pests and plant diseases is an important aspect of scientific agriculture, and it appears that some amount of pioneering work in this direction has been done by the Provincial Agricultural Departments and the Imperial Agricultural Research Institute in the study of life habits of important pests and the control of certain diseases.

Insect pests, fungoid diseases and weeds not only damage the value of crops but also nullify the benefits of other improvements such as better seeds and better manure adopted by the farmer. In the case of sugarcane, for instance, this problem is said to be graver than that of cultivation or drainage. The fear is that the evil shows signs of spreading with every improvement in transport. The Russell Report quotes an instance of a survey taken in 1937 which showed that 37 to 53 per cent. of the cane delivered to five factories in Bihar was infected as against 20 to 30 per cent. in 1935. The total damage caused by insects and pests to Indian crops is estimated to be nearly 180 crores every year.†

* *Op. cit.*, p. 22.
† *Cf.* N. Gangulee : "India, What Now ?" p. 122.

Adoption of resistant varieties, changing the soil conditions or time of cultivation, and destruction of the pests by chemical or biological means are the chief means of fighting this evil. As far as State action in the matter is concerned, legislation has been passed in India embodying two lines of defence against insect pests and fungoid diseases : the first line of defence prevents the entry of foreign invaders into the country while the second line of defence consists in taking measures against the local and exotic pests with a view to eradicating them. In both these aspects, the law is wanting. Firstly, the Insects and Pests Act allows the import of plants in general, barring a few exceptions, provided they are accompanied by a health certificate and enter at a prescribed port. But insects and fungi that are harmless on their native soil may become destructive in foreign countries. It would, therefore, be safer to allow imports only of such types of plants as have been declared harmless by competent entomologists and mycologists after experimentation with the plants in isolated places. Secondly, compulsory control of pests and diseases has not been widely adopted in India, only 1 out of 11 major Provinces and 4 out of 700 States having so far followed this system of compulsory control.

A campaign against the spotted bollworm of cotton in the Punjab during 1938-40 showed that the treated area yielded more than the untreated area. By fighting the pests, cultivators in 183 villages in the cleaned area of 58,000 acres under cotton actually got 106,000 maunds more as compared with cultivators who had left their area uncleaned.* The value of eradicating and controlling insects is thus clear and yet the problem has not been paid sufficient attention. Pests spread from one part of the country to another and though the Act permits of inter-provincial legislation to prevent this spread, the Provinces and States have not been able to take full advantage of this provision because no regular survey of the insects and fungi of India has yet been carried out. Only half of the Provinces and 1 per cent. of the States have organised their entomological and mycological services. It is one of the recommendations of Sir John Russell that executive action in regard to pest and disease control should be taken by the Central Government as it requires more general measures on uniform lines than is possible for provincial Governments to adopt. It may be added also that co-operative societies would be an excellent agency for making available to the farmer cheap insecticides of proved efficacy as well as the necessary spraying and dusting equipment.

* *Indian Farming*, May 1942. p. 271.

(*c*) This point need not detain us here, as we have dealt with the problem of adequate water supply elsewhere. Irrigation by suitable means is the very foundation of a stable agricultural economy in a country like India. But, as the Russell Report aptly puts it, this is only a part of the problem. "When a great dam or barrage has been opened with much ceremony and bourish of trumpets, it must always be borne in mind that the problems still remaining are greater than those already overcome because they are more continuous, more subtle and much less under the control of the experimenter."* There are problems of selection or, if necessary, production of new varieties of crops suited to the new conditions ; problems in the designing of new cropping schemes, so as to arrange a sequence of crops at once profitable to the farmer and permitting the best use of the water available; and, the problems of waterlogging and neutral salts in regions of canal irrigation. To quote the Report again : "Behind every large irrigation scheme there lurks the spectre of the alkali problem, for which in its final stages no economic solution has been found."† It is for this purpose that the Report has recommended the creation of a Central Irrigation Research Station to deal with all agricultural problems connected with and arising out of irrigation.

(*d*) Let us now turn to the problem of the prevention of soil erosion, a serious evil which has also been mentioned elsewhere as contributing to the low productivity of our agriculture. The factors responsible for soil erosion are‡ : (i) deforestation, (ii) heavy grazing, (iii) seasonable concentration of migrant flocks on the alpine migration routes, (iv) ploughing or clean cultivation of sloping land, and (v) fire, as in jhuming. Erosion occurs not only in areas of heavy rainfall, but also in dry regions. The problem is to reduce the velocity and the amount of water running off the surface. For this, there are several methods : (1) afforestation of the top slopes, (2) putting the upper slopes into grass, (3) ploughing along the contour lines instead of across them, and (4) bunding or terracing. Some work in this direction has been done by the Forest and Agricultural Departments, but the problem calls for more far-reaching measures. "Protection against erosion should be a State responsibility and not left entirely to the individual," observes the Russell Report.§ It also recommends the holding of annual Soil Erosion Conferences where

* *Op. cit.*, p. 57.
† *Ibid.*, p. 58.
‡ *Ibid.*, p. 59.
§ *Op. cit.*, p. 59.

experts in forestry, animal husbandry and soils could meet and discuss the problems of different areas and suggest suitable remedies. The recommendations of such conferences could then be carried out by the minister-in-charge, who might levy a rate on all lands thus protected. At present, the Crops and Soils Wing of the Board of Agriculture holds biennial gatherings where questions of general interests such as soil conservation, control of plant virus diseases, and also matters of advanced scientific research, such as vernalisation and plant hormones are discussed.

The solution of the problem of soil erosion is inevitably linked up with the adequate provision of grazing areas, enclosures to prevent indiscriminate grazing, rotational grazing and wider introduction of fodder crops, which in turn would mean not only an improvement in livestock but also more manure and therefore greater fertility.

(*e*) This takes us to the question of better manures and fertilisers, a theme which has been the subject of comment and discussion for the last three-quarters of a century. The problem here is, as Dr. Voelcker emphasised, not just ignorance or apathy on the part of the cultivator, but absence of cheap fuel on the one hand, and the costliness of artificial manures and fertilisers on the other. The former needs careful planning by the Forest Department which must consider the practicability of planning quick growing trees near the villages. As to the latter, the technical side of the question has been receiving attention from Government experiment stations, but the problem at bottom is that of finding for the farmer the resources necessary for the purchase of fertilisers and manures or of making them cheap enough. As for chemical manures, India imports about 75,000 tons while she manufactures not more than 25,000 tons. It is now estimated that she needs 350,000 tons. There are excellent chances of manufacturing these manures in India, and at a cheap rate too so that there can be a larger use for the specialised crops like rice and others. The urgency of the import of fertiliser plants has been further brought out by the exigencies of the food problem during the present war but so far all attempts to secure them have failed.

(*f*) Similar in nature is the problem of better implements and methods of cultivation. The adoption of improved ploughs seems to be progressing more rapidly than other improvements, but the bullock cart remains as primitive as ever. Considerable success has been achieved in devising new implements and tools, but the determining factor in the situation is their cost in relation to the cultivator's buying capacity. The modernisation of agricultural technique is essential

for securing any increase in productivity, but it appears that under Indian conditions, there is a vicious circle of poverty and primitive technique which must be broken at several points simultaneously.

(*g*) To come now to our last point above, viz., better systems of cropping. It has been observed that there has recently been a distinct falling off from the former standards of rotation of crops. The lure of immediate gains has in most cases led to an unhealthy and in the long run unprofitable concentration on commercial crops which exhaust the soil. The general experience in India is in favour of rotations rather than single cropping, and it is urgently necessary to investigate from this point of view the possibilities of each agricultural region with due regard to the relevant local factors so as to evolve a sound scheme of rational croppings.

To sum up, crop improvements presuppose a number of concerted measures along the lines indicated above, and although some work has been done by Government agencies, the total results so far achieved are not impressive.

II. Technical Research

To complete this survey of crop improvements, we must now review briefly the work done so far by way of technical research which is the necessary basis of all these improvements. There are, clearly, three stages to be taken into account in this connection : (*a*) acquisition of scientific knowledge, (*b*) experimentation on basis of the same with a view to demonstrating the new methods and results of scientific knowledge ; and (*c*) extension of the results thus obtained to the cultivator. In other words, the problem is threefold : new knowledge has to be gained by specialised research and study; it has then to be tested on experimental farms and stations under conditions approximating to those found in rural life ; and, finally, the results thus arrived at have to be disseminated as widely as possible among the agriculturists, who are the real parties concerned and who must therefore be convinced as to the desirability as well as practicability of the improvements suggested.

As regards (*a*) above, the best media are the Universities and the few technical institutes. In this respect we have made only a small beginning. Our Universities have been, by far and large, examining bodies. They have concentrated more on literary and academic work rather than on technical research of a higher type. Whenever any expert is necessary, the practice on the part of the authori-

ties has been to import one from outside.* In a few cases, our own scholars have transcended the limitations of the educational system under which they grew up and have ventured into higher technical and scientific research, often with remarkable success. But the Universities by themselves have contributed but little in this direction.

In the various laboratories we have in India at present, excellent scientific work is being done under the guidance of men like Sir C. V. Raman, Meghanad Saha, Birbal Sahni and others. Some of the agricultural institutes in the country have been carrying on research work in the applied branches of modern science bearing on different aspects of agriculture. We have specialised research institutions such as the Irrigation Laboratory at Lahore, the Cotton Research Laboratory at Matunga, the Lac Research Institute at Ranchi, the Forest Research Institute at Dehra Dun, the Indian Central Jute Committee's Technical Laboratories at Calcutta, the Sugarcane Breeding Station at Coimbatore, the Imperial Institute of Sugar Technology at Cawnpore, the Coffee Research Station in Mysore, the Tea Research Station at Techlai, the Institute of Plant Industry at Indore, and the Imperial Dairy Institute at Bangalore, all of which have been doing, we are told on good authority, valuable work in their respective spheres.

The problem, however, is vast and has many ramifications. Science has progressed and is progressing rapidly, and we have to make up a great deal as yet. The research activities of the Provincial Departments of Agriculture are necessarily of a local character, and paucity of funds is a great handicap. The Imperial Agricultural Research Institute at New Delhi occupies a position of all-India importance. Its purpose is to provide a scientific basis for the activities of the various Provincial Departments of Agriculture and to undertake work of such wide application as must be done at one centre so as to serve the entire country. The work of the Institute at present falls into three divisions : (i) the standardisation of methods for the use of other stations, (ii) making collections of insects, fungi, soils, etc., and also a register of varieties of crops, all these to be available to the staffs of the Provincial Departments ; and (iii) investigation of agricultural scientific problems which seem to be near to practical application.† This Institute ought, in course of time, to win a position of prestige and intellectual leadership, and to this end, the Russell Report has made several suggestions. It is necessary that

* May we point out here that it would be far better to send out our own scholars and administrators abroad to study conditions in other countries and to make suitable recommendations on the basis of the same?

† Russell Report, p. 81.

the Institute should work in close co-operation with the Imperial Council of Agricultural Research, which, in turn, must insist on the use of certain recognised methods of sampling and analysis. It could take up, for example, problems like the methods of sampling of soils and analysis of crops, the collection and examination of soil analysis made in different parts of India with a view to preparing soil maps, comparisons in field experiments of the relative values of nitrogen in different kinds of manures, etc. It would also have to co-operate with several other Departments, for example, with the Health Department in investigations likely to improve the quality of the dietary of the villagers, and with the Marketing Department in investigations likely to improve the market value of Indian agricultural products.*

The Imperial Council of Agricultural Research is a central body charged with the co-ordination of agricultural research in India. Its *modus operandi* is to make grants for specific purposes to Universities and Provincial Departments of Agriculture for research along approved lines. The Council does not itself generally undertake investigations, but in two directions it has done so, in regard to (*i*) the cost of production, especially of cotton and sugarcane, and (*ii*) the statistical control of agricultural experiments. Several schemes of the Council's work are carried on through the various special institutes, and an adequate idea of this can be obtained only by detailed reference to the Russell Report. As the Report puts it, " a vast amount of pioneering work extending over a wide range has been accomplished," and, " a stage is now reached when a reorientation of the Council's activities should be considered." The great need now is for " a fuller use of existing knowledge rather than the accumulation of mere knowledge, for work on the cultivator's fields rather than in the laboratory."† At present, the Council issues a monthly journal in which the results of its research work are published.

Another defect which is noticeable in the present organisation of research is that the technical problems are being attended to without due reference to their economic aspects. Technical research has, indeed, its value but it cannot prove fruitful unless it is correlated with research into the conditions under which farming is carried on. The Colleges of Agriculture at present specialise in the technical aspects of agricultural research but pay comparatively small attention

* *Ibid.*, pp. 82-85.
† Report, p. 215.

to economic aspects. Some of the Universities have, no doubt, contributed their mite by encouraging the writing of these on different problems of agricultural economics. There have been a number of village surveys and re-surveys and several contributions by officials and non-officials on some problems of rural reconstruction. As a result, the general nature of the problems is known fairly well. All are agreed that the main problem is to make agriculture a paying proposition ; but this can be done only by a suitable co-ordination of technical and economic research work and on this aspect of the problem the Russell Report has hardly anything to say.* Moreover, the commercial instincts of the ruling authorities have always inclined them to favour research in respect mainly of commercial crops, and here the Russell Report rightly remarks : " By far the largest part of the land of India is used for producing food crops intended for home consumption. Investigations on these should be made in conjunction with the human nutrition experts who could advise how far existing dietaries are deficient and what supplementary crops, vegetables, fruits, etc., should be grown in order to make up for the deficiencies in the various regions."† In view of the opinions of Sir John Megaw and Dr. Aykroyd as to the nature of our health and diet problems, and the supreme urgency of adequately feeding the teeming millions which we have referred to elsewhere, this recommendation of Dr. Russell's hardly needs further emphasis. We should only add that here again, there is obvious need for a closer collaboration between technical experts and economists.

But to go on to (*b*) above, viz., the work of the Agricultural Experiment Stations, which are concerned with the second stage in technical research mentioned already. There are a number of such Agricultural Research Stations scattered all over the country, but it is doubtful if their work so far has been fruitful. To quote the Russell Report : " In view of the fact that Indian experiment stations have been functioning for so many years it seems at first surprising that so little of the work done has found its way into the general body of agricultural science as expounded in the standard treatises."‡ The work done so far has been narrowly confined to the laboratory and the experiment station ; it has not been brought into living, organic relationship to the work

* It may also be mentioned here that a report which deals with several special problems of Indian Agriculture, not necessarily connected with the work of the Imperial Council of Agricultural Research, has not a word to say about the reform of the land system, which, few will doubt, is the most vital need of the day.

† *Op. cit.*, p. 223.

‡ *Op. cit.*, p. 6.

on the fields. As in our agriculture, so in agricultural research, "fragmentation" has been the bane, and the Report recommends a better co-ordination of the work done and a better publicity for the results achieved through a series of studied monographs.

(c) Then comes the problem of extending the results to the cultivator. This is the greatest need of our times, for agricultural technique and methods in this country have been stationary for generations past. Some excellent results by way of better yields have been obtained at the various laboratories and research stations, but of what avail is all this so long as the stream of knowledge is not duly canalised so as to fertilize the actual fields and farms where the cultivator works ?

The Imperial Council of Agricultural Research has, on the recommendation of the Russell Report, undertaken an examination of the methods of demonstration and propaganda at present in use and has now put forward the project method, the main idea of which is to put across a whole group of tested improvements simultaneously and to observe the combined effect of all these on the cultivator's income and on the land.* This method implies the use of the best seed available, the best methods of cultivation, manuring, irrigation, drainage, preventive and curative measures against pests and diseases, improvement of livestock, methods of marketing etc. The demonstration method hitherto adopted is usually confined to one item and is carried out by the Government staff, whereas the project method takes all the items together and has to be worked out by the cultivator himself under official guidance and supervision. For the purpose of appraising the utility of an individual improvement a single demonstration plot may prove sufficient, but for a group of improvements, an entire holding or even a village as visualised in the project method is preferable. As an instance, the Shirala project in C.P. may be cited. Under this project, farming is carried out by the cultivator himself with the help of a subsidy and also necessary advice from Government. The project covers an area of 300 acres embracing 10 to 12 holdings. It was sanctioned for a period of three years at an estimated cost of Rs. 9,553 to be met by the Provincial Government. An additional non-recurring grant of Rs. 2,671 was given for implements, appliances, breeding bulls, etc. Under the scheme, there is also provision for subsidiary industries such as improved method of preparing ghee, rope making, poultry farming, etc. The farmers are instructed to keep accounts of the business. The message of rural

* *Indian Farming*, March, 1941.

reconstruction is brought home to the villagers through *bhajans* and dramas. A radio set is also provided for the benefit of the village. Steps are taken for co-operative purchases and sales, cattle improvement, amelioration of social conditions, and encouragement of thrift. The results of this enterprise are not yet known. In a huge country like India with its varying conditions, one single project organisation cannot be enough.

In a country like ours with its colossal illiteracy and ignorance, all sorts of propaganda methods including the cinema, the radio, exhibitions, fairs and travelling motor vans have to be combined if any substantial improvements are to be made. Dr. Russell has also endorsed the observation of Dr. Voelcker, referred to elsewhere by us, that the Indian cultivator is not so hopelessly conservative as not to use improved methods and technique even when the advantages of the same have been demonstrated to him. Of course, the problem is to find just the sort of improvements which are practicable for him ; for, whatever the technical excellence of the improvements suggested, it would be but wise counsels wasted if the cultivator is not financially in a position to adopt them. This, again, has wider implications, implications relating to the provisions of adequate long-term and medium-term finance for this prime industry of ours, a problem which has been examined elsewhere in this study.

III. Results

In a paper read before a joint meeting of the India and Burma Section of the Royal Society of Arts and the East India Association on 16th January, 1942, Sir Bryce Burt, ex-Vice-Chairman, Imperial Council of Agricultural Research in India, reviewed the progress of Indian agriculture during the decade following the Report of the Linlithgow Commission.* He maintained that during this period the average yield per acre of several crops in India had been raised and the monetary reward to the grower enhanced, so as to provide him with more and better food for his family and his cattle. In this connection Sir Bryce gave some facts regarding agricultural improvement which are summarised below :

(i) The average yield of cotton in the quinquennium 1932-37 was 108 lbs. per acre as compared with 96 and 95 in the two previous quinquennial periods. As for the change in the quality, in the three years 1927-28 to 1931-32 short staple cottons, i.e., below ⅞'' formed 75 per cent. of the whole and medium staples 25 per cent., while in

* Journal of the Royal Society of Arts, February, 1942, pp. 207-28.

1938-39 the figures were : short staple 63 per cent., medium staple 32½ per cent., and long staple 4½ per cent., (ii) In the case of jute in 1937-38 the area under departmental varieties was 1,763,000 acres out of a total of 2,889,000 acres, (iii) The remarkable expansion of the groundnut crop has continued until India is the world's largest producer and its second exporter, despite the enormous internal consumption. The crop has spread from 300,000 acres in 1900 to nearly 9 million acres in 1937-38. (iv) In respect of sugarcane, about 80 per cent. of the total area was brought under improved varieties by 1939 and the estimated production per acre, expressed as *gur*, increased from 1.1 tons in 1927-28 to 1.4 tons in 1937-38. As a result India can now claim to have a modern white sugar industry which is capable of supplying all her requirements, (v) As for rice, in 1937-38, the area under improved varieties had reached 3,759,000 acres compared with 634,000 acres in 1927-28. (vi) Progress in wheat production can be seen from the fact that the total area under improved varieties just fell short of the 7 million acre mark in 1937-38, this being nearly one-fifth of the total area. (vii) The tobacco industry, which was in its infancy in 1929 now employs about 2,500 flue-curing barns. Some 85 per cent. of the total requirements of the Indian cigarette factories were provided by Indian-grown leaf in 1938 and an important export trade had been developed.

Sir Bryce also referred to the work of the Research Council in production of better varieties, improved methods of cultivation and manuring, better methods of harvesting and handling, measures taken to deal with locusts, operations in the production and use of protective *sera* and other measures of cattle improvement. He also mentioned briefly, the measures taken for consolidation of holdings, for improvement in soil management and fertilisers and for better marketing of agricultural produce and gave on the whole what may be considered a rosy picture of the progress achieved.

The point, however, is : What does all this come to in the aggregate ? Is the rate of progress satisfactory considering the seriousness of the problem ? Has Indian agriculture been set on the right path ? The answer is obvious, and it was, in fact, brought out by some of the discussion that followed the reading of Sir Bryce's paper. It was pointed out that the fact that only one-tenth of the total cultivated area in India was under improved varieties, and that while four-fifths of the area under sugarcane and three-fifths of the area under jute were under such varieties, the corresponding figure in the

case of cotton was one-quarter and for wheat one-fifth. It was further pointed out that though the figures given in Sir Bryce's paper were impressive, they could not be considered satisfactory for a sub-continent of the size of India ; that India spent far too little on agriculture—just 1½d. per head of population, that is, less than Rs. 70 per 1,000 of population. Some speakers referred to the comparatively poor success of improvement work, because of the lack of co-ordination in the work of the various agencies employed and the rather perfunctory manner in which the results of scientific research were conveyed to the Indian peasant. Major-General Sir John Megaw pointed out that within the past ten years the population had increased by about 15 per cent., so that even to maintain the present meagre standards of existence the production of essential commodities must show a corresponding increase.

One central fact emerges from this survey, viz., that no substantial progress can be achieved unless the Centre takes a more active interest in the work of agricultural improvement. The problem is not merely one of technical research, education and propaganda, but of a new orientation of policy. The lines along which this has to be attempted are indicated in Part III, but here we may just note that the Russell Report itself suggested an extension of the scope of the Imperial Council of Agricultural Research. It recommended that a Development Commission, which could be combined with the Council, be set up to plan out large-scale improvements, to suggest ways of raising the standard of life in the villages, and to give necessary technical advice for carrying the plans into action. The problems that ought to be tackled by the proposed Commission are* :—

"(*a*) Soil conservation, deterioration and loss of soil, exhaustion and manuring, soil erosion, salt, alkali.

(*b*) Crop production, especially the planning of cropping schemes, the balance between cash, food, and fodder crops. the fusion of animal husbandry and agriculture, the improvement of grazing land, the taking of action on the results of marketing and other economic enquiries.

(*c*) The exploitation of discoveries or processes of commercial importance. The Commission would not itself embark on industrial enterprises but it would smooth the way for others to do so by helping to bridge the gap between the laboratory and the factory, and by giving information and advice to the commercial body undertaking the work. Seeing

* Russell Report, pp. 70-71.

that some kind of monopoly would usually have to be granted for a term of years the Commission would advise the Government on the technical side as to terms that could be accepted.

(*d*) The multiplication and distribution of seeds of approved varieties of crops and of named varieties of trees.

(*e*) The improvement of village roads."

Comment on each of these points is hardly necessary, as their essential soundness is beyond question. All these have to be taken up as part of a properly worked out scheme—a subject we discuss in the final sections of this volume.

CHAPTER VIII

THE LAND PROBLEM

General Considerations

The ownership of land and the nature of rights and obligations as between the members of the rural community arising as a consequence of the utilisation of land are, in all countries, the product of a long evolution determined by the geographical, economic, social and political conditions and circumstances of the community in question. The whole complex of land tenures and tenancies which arises as a result of this process affects vitally the efficiency of cultivation as also the distribution of the produce of the land. The State also plays an important role in this process through its land revenue and agrarian policy. Whether the State recognises private ownership in land, whom the State recognises as owner and on what terms, whether the owners actually cultivate the land, or whether they hire it out to tenants, on what terms these latter are called upon to work, what, in brief, is the system of ownership and cultivation of land—these are factors which determine the structural basis of the country's economy. If this structural basis is unsound, reform projects that may be taken in hand in respect of particular aspects of agriculture must necessarily bear small fruit. The State must, therefore, take into account the consequences of its agrarian policy on all these vital questions, and must help in bringing about necessary changes in respect of tenures, tenancies, and taxation so as to ensure that the land system as a whole does not become a drag on agricultural progress.

At the minimum, the State is interested in securing for itself adequate income from land for the purpose of carrying on the work

of administration. Where the State is predatory in its character, land revenue is, in fact, the instrument of extortion through which the subjects are made to pay a tribute to the ruler, which the latter may spend as he likes. Modern land revenue administration is, however, much more complex. As soon as the State tries to establish itself on a stable footing, it must systematise land revenue assessments and collections. It must place them on some comprehensible basis, and, in course of time, it has to see that the interests of those who own the land and of those who work on it are so ordered as to conduce to the general interest. Land revenue administration thus takes on a wider orientation, and gets more and more linked up with the whole problem of the welfare of the peasantry.

Modern States have been taking on continually increasing responsibilities in matters economic, including the prosperity of agriculture. This has necessitated the adoption of far-reaching agrarian reforms. So far as India is concerned, however, the land problem has not received sufficient attention from Government, and we find ourselves confronted by an inefficient and exploitative land system which saps initiative, hampers economic progress and leads to inequitable distribution. This land problem is at the root of the many deficiencies and drawbacks of Indian agriculture, and it is certain that unless the various rural reconstruction programmes that are being discussed include as an integral part this problem of the reform and reconstitution of our land systems, including the system of land taxation, along equitable lines and by appropriate stages, the desired results cannot be achieved.

I. Evolution of the Indian Land Tenure Systems

The main features of the three principal types of land systems in India, Zamindari, Mahalwari and Ryotwari, have been outlined in an earlier chapter and we have also referred to the types of settlement, permanent and temporary. Here we shall outline briefly the evolution of these land systems, and indicate how, in course of time, there has come into existence a variety of interests and classes in land, with wide divergences as between the different parts of the country in respect of the economical relationships between them.

A. The Permanent Settlement—Zamindari.

As the East India Company established its political domain in one part of the country after another, it had to evolve some system of dealing with the landed interests. But this was no simple task for the Company as it found itself confronted with long-established

customs and usages. The officials of the Company, however, had little interest in anything beyond the extortion of the maximum amount possible from the agriculturists, and naturally, they took the line of least resistance by recognising the existing arrangements, or adopting new ones, where necessary, in order to make sure of their own receipts. The system of land revenue then prevailing generally dated far back to the days of the Hindu Kings prior to the Moghul rule, a system under which the king was entitled to one-sixth of the gross produce as measured by the actual product gathered on the threshing floor. In the days of Sher Shah and Akbar, certain reforms had been introduced, such as a cadastral survey, and the payment of revenue in cash or in kind at the option of the cultivator, the amount being determined in view of a variety of factors including the fertility of the soil. In the latter days of the Moghul Empire, we have it on the authority of Dr. Radhakamal Mukerjee,* that collective assessments superseded the methods favoured by Sher Shah and Akbar. Settlements were made with the provincial chief or any person in authority for a fixed annual revenue and the imperial share was raised to half the produce of the land. This led to the oppression of the peasantry by the revenue farmers who extorted from the cultivators as much as they could, and there were cases of women and children being sold as slaves for defaults in payments of revenues. The East India Company also farmed out the revenues to older zamindars and chiefs in Bengal, Bihar and Orissa. Warren Hastings tried temporary or short-term settlements, but the system had disastrous results. Ultimately came Lord Cornwallis's Permanent Settlement in Bengal, based on the analogy of English conditions, but involving in fact an unwarranted revolutionary interpretation of ownership rights, the consequences of which are being reaped even to this day. The zamindars who were originally agents of Government and, therefore, under the supervision of Government were declared full proprietors of the areas over which their revenue collection extended. The assessment was fixed at about 10-11ths of what the zamindar received as rent from ryots, the balance of 1/11ths constituting the zamindar's remuneration. The revenue liability was fixed in a rough-and-ready manner without any survey of landed rights and interests or any investigation into the productive capacity of the different classes of soils. The intention of protecting the tenants as well was never made effective. The landlords became a functionless and parasitic class in-

* "Land Problems of India," p. 324. It is interesting to compare in this connection the description of this system as given by the Hon'ble Mr. Azizul Huque in his work, "The Man Behind the Plough" Chapter XIV.

terested only in getting the maximum of rent from the peasants, and Cornwallis's dream of creating in Bengal a beneficent landlord-capitalist system resting on the contentment of the cultivator failed to materialise.* It took three-quarters of a century for the iniquity of the position to become apparent. It was only after 1859 that attempts were made to grant protection to the cultivator by means of tenancy legislation.

In other parts of India.—In the meanwhile, steps were taken to extend the Permanent Settlement to other parts of the country, as the Directors of the Company were favourably impressed by the regularity with which revenues poured in from Bengal under that Settlement. The system was applied to Benares, to North Madras and certain parts of South Madras, but difficulties were encountered as soon as it was sought to be introduced in the rest of South Madras. (In the major portion of the Presidency, the villages were of the ryotwari type, and the officials of the Company, under instructions from the Court of Directors, tried to group together these villages artificially and to sell the landed rights therein to the highest bidders who were then to become the landlords of the whole estate. The attempt failed miserably and had to be given up in favour of the ryotwari system.) The question of extending Permanent Settlement came up for discussion even after the abolition of the Company's rule, but Government had learnt by experience and turned down firmly all proposals for a further extension of the system.

It is perhaps pertinent to observe here before leaving this topic, that two issues have often been mixed up in the controversies on the subject. One refers to the period of the Settlement, that is, whether the share of the State is to be settled in perpetuity or only for a definite period ; the other is as to who should be recognised as the owner of the land and who should therefore be dealt with by the State directly —the cultivator himself or some intermediary. It has happened as a matter of historical accident that the Permanent Settlement has been associated with the zamindari system of tenure, and temporary settlements have characterised the ryotwari system of tenure. There is, however no necessary connection between the two. Permanent Settlements even with ryots individually are conceivable, and were in fact contemplated by the originators of the ryotwari system. On the other

* *Cf.* "In that interval of 66 years, that is, between 1793 and 1859, while the proprietary body grew in strength and prospered in wealth, village communities perished, the parganah rates (by which the assessment of the resident cultivator's rent was limited) disappeared, and almost every vestige of the constitutional claims of the peasantry (if ever such existed beyond a small privileged class) was lost in the usurpations and encroachments of the landlords." The Lt.-Governor of Bengal speaking before the Legislative Council in 1883. Quoted by the Hon'ble Mr. Huque, *op. cit.*, p. 255.

hand, we may also have a system of temporary settlements with zamindars. An illustration of the latter is the Malguzari system in the C. P. The Malguzars were revenue farmers under the Peshwas. They had no proprietary rights in the land. But, the British Government recognised them as owners and heads of villages and made them responsible for the payment of land revenue, the only difference in this case as compared with that of the landlords in Bengal being that the settlements here were temporary. Besides these zamindari systems in Bengal, U. P., parts of Madras and of C. P., there are several other zamindari types of tenure in India, such as, for example, the Talukdari system in parts of North Gujarat and the Khoti system in the Konkan. The land revenue assessment and administration in these cases are governed by special Acts. Although there are differences in detail in the working of these various types of tenures, the problems arising under all forms of zamindari systems are, broadly speaking, similar, and it is not proposed here to examine all these systems in detail.

Abandonment of the Permanent Settlement

Doubts as to the desirability of extending the Permanent Settlement to the new territories that were being added from time to time to the Company's domain were expressed as early as 1808, the main objection being the possible loss of revenue on that account. In 1821, the Court of Directors declared themselves against the introduction of Permanent Settlement in Northern India.* Nevertheless, the controversy raised its head several times thereafter, especially in view of the serious toll of famines in different parts of the country. One school of thought believed that a permanent fixation of the State's demand would be of great help to the landed interests and the peasantry, but the Government of the Punjab opposed vigorously the conclusion of a Permanent Settlement on the ground that the Punjab was still undeveloped and that it would be wrong to fix up permanently the State's share in view of its great possibilities of development in the future.† The question became the subject-matter of several Government minutes and despatches, and in 1869, it was decided that the question of effecting a Permanent Settlement should be deferred so long as the land continued to improve in value.‡ Finally, in 1883, the Secretary of State for India wrote to the Governor-General of India directing that the policy of Permanent Settlement should be formally abandoned§. As Dutt points out, the policy was not abandoned be-

* R. C. Dutt, "Economic History of India in the Victorian Age," p. 84.
† *Ibid.*, p. 276 ff.
‡ *Ibid.*, p. 289.
§ *Ibid.*

cause it was found to be at all against the interests of the people, but because the Government had now quite forgotten the original beneficent aims of policy as outlined by Lord Cornwallis. The decision not to extend the Permanent Settlement to other parts of India had thus nothing to do with the recognition of evils such as, for example, the Bengal Land Revenue Commission have now pointed out with such emphasis.

B. The Mahalwari System

The principles of the Mahalwari or joint village system which was first adopted in Agra and Oudh and later extended to the Punjab were laid down in Regulation IX of 1833*. It was recognised in these cases that the villages concerned were units by themselves, the ownership of property was joint or communal, and that it was not possible therefore, to work out here a settlement with individual landlords as in the case of Bengal. Hence, these villages or Mahals, were settled with directly, though a co-sharer of standing was generally selected to undertake the primary liability of paying the land revenue. There are variations in detail as between the different parts of the country under this system, variations in regard to the procedure and period of settlement and the land revenue assessed. The State demand varies from 40 to 70 per cent. of the rental. In the Agra Settlement, although the responsibility for payment of land revenue rests on the village as a whole, any section of a village or a co-sharer can demand a separate or individual revenue liability. In the Punjab also, though the liability is in theory joint as well as several, the share of the revenue from each landholder is distinguishable and can be recovered separately, so that the cultivators are almost in the same position as the peasant proprietors in Bombay and Madras. In the C. P., the system is practically on the same lines as the Agra Mahalwari Settlement so far as the basis of settlement is concerned. There is, however, the significant difference that the State has recognised the Malguzars, that is, the old revenue farmers under the Mahrattas, as heads of villages, with proprietary rights. The idea once again as in the case of Bengal was to create a new class of vested interests who would be loyal to the new Government. The conferment of this status was considered as a "gift" and the claim of the State was limited to one-half of the rental. The settlements were to operate for 30 years. The consequence of all this has been the break-up of the old village community and the growth of an unco-

* Dutt, *op. cit.*, p. 84.

ordinated individualism, whatever may have been the original intention of those who advocated and introduced the Mahalwari system based on the recognition of the joint character of the village community and the common rights in lands attached to the village.

C. The Ryotwari System

We now go on to trace the evolution of the third type of land system in India—the Ryotwari system, under which the individual ryot is dealt with directly by the State. This system was first introduced in the districts of Baramahal in Madras by Captain Read and Thomas Munro in 1792, and was gradually extended to other parts of the province and thereafter to Bombay. "Between 1808 and 1818," says R. C. Dutt,* "the Madras Board of Revenue urged the wise plan of recognising the village communities of the Province." And he adds, "but representative village communities had no place in the scheme of the Company's absolute Government; the Directors decided to deal with the cultivators individually, without any intermediate bodies. The ancient village communities of Madras declined from that date." The same story was repeated in Bombay. Elphinstone, indeed, sent home reports† about these village communities which contained "in miniature all the materials of a State within themselves." He also drew the attention of the authorities in London to the fact that "a large portion of the ryots are the proprietors of their estates, subject to the payment of a *fixed land tax* to Government," but, to quote Dutt again, "a fixed resolve to make direct arrangements with every separate cultivator and to impose upon him a tax to be revised at each succeeding settlement, necessarily weakened village communities and extinguished Mirasi rights." Dr. Radhakamal Mukerjee has refuted Baden-Powell's contention that the ryotwari village was the original type in India, that the earliest settlers had no ideas of common tribal ownership and that individual property was the rule even in early land settlement.‡ If this is true, the claim that in recognising the ryotwari system, the Government only gave statutory recognition to what was already a settled fact would be untenable.

Under the ryotwari system, the ryot or the landholder is recognised as holding the land directly from Government without the intervention of any intermediaries. His tenure is known as "occupancy" tenure which means the lands are heritable, trans-

* Dutt, *op. cit.*, p. 67.
† *Ibid.*, p. 50 ff. (italics in the original.)
‡ "Land Problems of India," pp. 325-7.

ferable and otherwise alienable without the sanction of Government, but are subject to forfeiture in case of failure to pay the land revenue as assessed periodically. A system like this leaves a great deal of discretion to the Settlement Officer at the time of assessment; there is necessarily a great deal of guess-work in the estimation of several of the items relevant to the fixation of the assessment, and, when this is combined with the fact that every periodical revision is utilised as an occasion for enhancement, we have some explanation of why this system of ' peasant proprietorship ' has not brought in all the glorious results attributed to it by economists and land reformers. The implication of the ryotwari system is that the State owns the land, and that the landholder derives his title to it directly from the State. Apart from the other consequences of this system, to which we shall turn presently, this claim of the State has destroyed the collective basis of village life and organisation.

Decay of the Village Community

It will be clear from the above survey that the early British administrators had no clear policy in regard to land settlements and assessments. Their only policy was to take as far as possible the line of least resistance, compatible, of course, with their desire to get more and more " tribute " out of the land. It may be admitted that this attitude on their part was natural at a time when the fullest exploitation of the land was supposed to be the obvious and undoubted privilege of a conqueror. The point only is that the early land policy of the Company and even of the officers under the Crown brought about in India a veritable revolution, a revolution, all the more pernicious because perhaps it was not designed, in the basis of land-ownership, the system of cultivation and the legal and social relationships as between the different classes of the rural community. All the three types of tenures—zamindari, mahalwari as well as ryotwari—had this effect in common—the disintegration of the village economy. Evils of all sorts due to the growth of parasitic interests on the land manifested themselves before long and a series of enactments had to be passed in the course of the nineteenth century to cover the gaps or to remedy obvious evils.

Permanent vs. Temporary Settlement

It is hardly necessary at this date to examine in detail the case for and against Permanent Settlement, which was the earliest phase of British policy in regard to land settlements in India. The follow-

ing arguments have, at different stages of the discussion, been advanced in favour of a Permanent Settlement :

(i) that it ensures to the State a fixed and stable revenue without the necessity of incurring heavy expenses on reassessment and collection ;

(ii) that it secures the loyalty of the zamindars thus benefited ;

(iii) that it enables the zamindars to act as natural leaders of raiyats ;

(iv) that it promotes agricultural enterprise and prosperity.

As experience has, however, shown, none of these expected advantages has materialised. On the contrary,

(i) The fixity of land revenue has meant a loss to the State ; the burden of land taxation has become iniquitous, and the State has had to resort to other forms of taxation in order to make up for the loss ;

(ii) The argument as to loyalty is only another name for creation of vested interests ; the State must really aim at securing the loyalty of the entire community, not of any one section by granting it special privileges.

(iii) The zamindars have not only failed to act as leaders of the rural community, they have actually oppressed the tenants by all sorts of illegal exactions and have become parasitic on the land ;

(iv) The system has led to a mass of litigation and agrarian discontent. It is socially degrading and administratively inefficient.

The Floud Commission have shown how the Zamindari system has ceased to serve any national interest at all. The greatest evil of the system has been subinfeudation. This is due to the large margin between the fixed land revenue and the economic rent of the land which has led to the creation of a number of intermediate interests between the zamindar and the actual cultivator. In some districts in Bengal, there are as many as fifty or more such intermediate interests between the zamindar at the top and the cultivator at the bottom.* The result has been a steady reduction in the number of actual cultivators possessing occupancy rights and a large increase in the number of landless labourers. When this is combined with the further evil of sub-division and fragmentation, the vicious circle is complete.

In view of all this, hardly anybody can now defend the Permanent Settlement. And, as to the legal aspect, even a jurist must admit

* Report, p. 87.

that there is no such thing as sanctity of contract when the contract becomes an unconscionable bargain "against public policy."

All this, however, does not mean that the problem can be solved by substituting temporary or periodical settlements for the permanent one. If that was so, the other parts of India should have been happy and prosperous. The main consideration is whether the land system as a whole, taking the interests, rights and duties of all the three parties—the State, the landlord and the tenants—together provides the right incentive to the efficient use of land as an agent of production, adjusts equitably the liabilities and responsibilities of all these parties concerned, and ensures on the whole not only an efficient, equitable and elastic system of taxation but a stable and well-balanced socio-economic structure. This latter is a much wider issue than that of permanent *vs.* temporary settlements.

So far as the narrower question of the duration of a settlement is concerned, it is easy to see that the balance of arguments is on the whole in favour of a system of long-term settlements, say 30 or 40 years, so that, on the one hand, there is no uncertainty as to the liability of the landholder and the cultivator, and, on the other, a scope for revision of the same on scientific lines at certain regular intervals. In order that such a system may function efficiently, it is, of course, necessary to regulate agricultural rents and also to lay down definite principles according to which assessment is to be revised. For, if revision is only another name for enhancement, these periodical settlements would only generate more discontent and trouble. It is the neglect of these principles hitherto which accounts for the fact that the permanently as well as the temporarily settled parts in India have suffered from the iniquities of the system of assessment and the inefficiency of cultivation inevitable under a system of exploited labour having no real incentive for betterment.

II. The Land Revenue System

Ancient and Mediaeval Systems

Only a brief mention may be made here of the pre-British land revenue system.* It is well known that under the ancient Hindu kings, Government demand by way of land revenue was usually one-sixth of the produce, paid usually in kind but in some cases in cash. The early Muslim rulers did not introduce any change in the system, economic, political or social, and the old "village communities" continued to function through the ages right up to the advent

* This section is based on Dr. Radhakumud Mukerjee's Note on the Indian Land System in the Bengal Land Revenue Commission's Report, Vol. II.

of the British. Ala-ud-din Khilji raised the Government's share to half the gross produce. The Tughlaqs again reduced it to one-tenth or one-eleventh of the gross produce, and injunctions were issued to Revenue Officers that they should look more to the extension of cultivation than to the enhancement of the rate for increase in revenue. To Sher Shah belongs the credit of having introduced the system of measurement in place of the old system of sharing. Lands were classified, standard yields assessed and the revenue demand fixed at one-third of the average on all classes of land. Sher Shah's reforms became the basis of Akbar's land revenue policy and administration, with the difference that Akbar proceeded to convert the grain rates assessed by Sher Shah into cash rates based on the average prices prevailing in different places. In the later days of the Moghul Empire, the State's claim was increased to one-half of the gross produce. The Peshwas accepted the basis of this old assessment, but with the weakening of the central power and the political unsettlement of the period, there developed in different parts of India a system of revenue farming which ensured to the rulers a steady income without the bother of assessment, collection and administration. At first, these revenue farmers were not hereditary ; they were just public officials, but the centrifugal tendencies of the time greatly strengthened their position and weakened correspondingly the position of the agriculturists. In course of time, there developed a complexity of tenures and revenue systems which made the task of the early British officials very difficult.

Land Revenue Under the British

Assessment under Zamindari.—We have already seen how the East India Company's policy in the early days was to adopt as far as possible the line of least resistance consistently with their anxiety to get as much out of the land as possible. That in taking up this fancied line of least resistance, they drifted into a policy which had unexpected revolutionary effects on the entire rural economy of the country is another matter. During the first few years of the Company's rule in Bengal, all sorts of methods of land revenue administration were tried, and it was found that in all cases, unscrupulous rent collectors oppressed the peasantry and brought disgrace on the Company. Ultimately came the Permanent Settlement which seemed to be the only way out of the muddle.

The principle underlying the assessment in Bengal, Bihar and Orissa was obviously that the State was entitled to the entire rental, except the expenses which would have to be incurred by the zamindar

and a small margin as his profit. It was on this understanding that the State claimed 9/10ths or 10/11ths of the rental, leaving the remainder to be taken by the zamindar as a surplus for himself. The revenue demand for Bengal, Bihar and Orissa was fixed at Rs. 268 lakhs. Commenting on this, Dr. Radhakumud Mukerjee observes* . " The fact was that the Company based their revenue demand on their own needs and not on the facts of actual zamindary receipts or ryoti rental of those days . . . The assessment . . . was based on the collections of previous years and there is nothing in the previous history of Revenue Administration to show that the proportion which the revenue bore to the gross assets of each estate had ever been ascertained with any approximation to authority." The same writer contends that the amount of land revenue thus fixed with reference primarily to the needs of the Company was also determined so as " to include in advance the cash value of future agricultural developments of the country and to take credit in the present for the unearned increments of the future."* For several years after the settlement, there was widespread default in payment, and landlords had to submit to a sale of their estates. In course of time, however, as waste lands were brought under the plough and the value of land increased this burden became relatively lighter. This, however, meant that it also became more unequal, for, as the Indian Taxation Enquiry Committee put it : " The increment in the value in an estate which was largely undeveloped at the time of the settlement may be many times that which accrues in one which was fully developed when the settlement was made."†

In Madras.—The origin of the zamindari along with the permanent system in the Madras Presidency was, as we have seen, just the same as in Bengal.‡ The zamindars recognised by the Company as such and settled with were ancient revenue functionaries, polygars, proprietors of what were called " Havely " estates and jagirdars, who had originally no claim to the proprietorship of the soil. For purposes of assessment, the share of the produce payable to the Government, one-half or one-third, or whatever there prevailed in each estate, was first ascertained and then converted into cash on the basis of prices prevailing in the year preceding the settlement.§ It may

* Dr. Radhakumud Mukerjee's Note on the Indian Land System in the Bengal Land Revenue Commission's Report ,Vol. II, p. 219.

* Dr. Radhakumud Mukerjee's Note on the Indian Land System in the Bengal Land Revenue Commission's Report, Vol. II, p. 221.

† *Op. cit.*, pp. 42-48.

‡ This point is brought out in full in the Report of the Madras Estates Land Act Committee, Part I (1938), The rest of the above para is also based on that Report.

§ *Ibid.*, p. 28.

also be noted here that the Patta Regulation enacted at the same time also provided that once the revenue demand was thus fixed, it was not open to the zamindar to exact a higher rent from the cultivators. Unfortunately, however, this law for the protection of the tenants or cultivators was allowed to become a dead letter. "No sooner," says the Report of the Madras Estate Lands Act Committee, "the Regulations became law, than the zamindar started his campaign to contest the rights conceded to the cultivator under the regulations."* Distraint, litigation, enhancement of rents and other harassments characterised the period upto 1865, when the Patta Regulation was repealed, and the Rent Recovery Act was passed, making rents unalterable. The developments thereafter have been complicated by the fact that there has been an uncertainty as to the exact legal meaning of certain provisions in the Rent Recovery Act of 1865 and also the Estates Land Act of 1908. The latter Act recognised for the first time certain rights on the parts of the cultivators, such as the right to water supply, but the above mentioned Committee's Report points out that the currency policy of the Government of India and the world economic depression reduced the vast mass of agriculturists in the country to a state of penury.

Assessment under Ryotwari

In Madras.—When the ryotwari system was introduced in Madras between 1820 and 1827,† the land revenue demand was fixed at one-third of the produce, payable as a fixed sum of money, irrespective of the annual yield or the prevailing prices. Even this was found to be oppressive. "For thirty years," says R. C. Dutt,‡ "the Province of Madras became the scene of oppression and agricultural distress unparalleled even in India in that age." The assessments had to be revised several times during these thirty years, but, on the whole, to quote Dutt again§: "Modern history scarcely furnishes a parallel to such an arrangement under which a large, industrious and civilised population were rendered incapable of improving their condition or acquiring agricultural wealth by a system of assessments which was kept up to the highest paying capacity of the country from year to year." It was, therefore, decided in 1855 to have an extensive survey and settlement so as to make the system more scientific and equitable. When this survey and settlement work was complete, it was decided that the Government should take one-

* Madras Estates Land Act Committee's Report, Part I (1938), p. 45.
† It may be noted that Sir Thomas Munro wanted a Permanent Settlement with the ryots.
‡ "Economic History of India in the Victorian Age," p. 68.
§ *Ibid.*, p. 78.

half of the " net produce " as revenue. Settlements were made for 30 years, which gave some relief to the cultivators. But, in making settlements over large districts, considerable discretion was exercised by the officers in charge. The " net produce " was calculated on some rough-and-ready assumptions. The cultivator had no right of appeal ; he must pay or quit. In 1864, Sir Charles Wood* wrote : " In truth, 50 per cent. of the nett produce has been a mere paper instruction, a fiction which has had very little to do with the actual facts of the administration, . . . in practice the rates levied have often absorbed the whole rental, and not infrequently, I suspect, encroached on profits also."

Coming to the present position, there are two principles that govern the processes of settlement in Madras.† The first is that assessment is on the land and does not depend on the kind of crops grown, except in the case of " wet " land, where it includes a charge for irrigation. The soil is first classified according to productive capacity, the normal yield is calculated on each class of soil after a series of experiments, and this is then converted into money value, not at the current rates which may be abnormal, but at the average of prices prevailing during the preceding 20 years, excluding famine years. The second principle relates to the estimation of the net profit of each cultivator. To obtain this, various deductions are made from the gross produce, so as to allow for seasonal variations, unproductive areas, cost of cultivation, etc. Of the net profit thus arrived at, 50 per cent. is claimed as the maximum Government share. In practice, the revenue demand is often less, the 50 per cent. rule applying only to land enjoying the greatest natural advantages. At the time of resettlement after 30 years, no change in basic principles is made. An enhancement in Government demand is made if there has been a rise in prices during the interval. Government claims no share of the increase in profits due to the improvements made by the cultivator himself, but it does claim a share in the profits due to some general improvement due, for example, to the introduction of a railway. By an enactment of 1924, the maximum enhancement permissible is limited to 18¾ per cent. when the variation of rates consists only in a percentage enhancement based on the rise in prices.‡

In Bombay.—In the early stages of British rule in this part of the country, temporary settlements were first tried. Regular Survey

* Quoted by Dutt, *op. cit.*, p. 322.
† Bengal Land Revenue Commission's Report, p. 124, *ff.*
‡ Indian Taxation Enquiry Committee's Report, p. 49.

Settlements were commenced by Mr. Pringle of the Bombay Civil Service in 1824-28, but they failed. The Government's share was fixed at 55 per cent. of the produce. This proved oppressive. "Numbers abandoned their homes and fled into the neighbouring Native States. Large tracts of land were thrown out of cultivation and in some districts no more than a third of the cultivable area remained in occupation."* A resurvey was commenced in 1835, lands were classified into nine different classes according to their quality, and settlements were made directly with the ryots. " The assessment was fixed by the Superintendent of Survey without any reference to the cultivator ; and when those rates were introduced, the holder of each field was summoned by the Collector and informed of the rate at which his land would be assessed in future ; and if he chose to retain it on those terms, he did ; if he did not choose, he threw it up."† A Governor of Bombay who gave evidence before the Select Committees of the Lords and Commons in 1853, stated that " wherever the Ryotwari system had been introduced—sweeping aside village communities and intermediate landlords—the agriculturists were a nation of paupers."‡ This settlement was made for 30 years. Before a new settlement was to be made, the issue of introducing a Permanent Settlement in Bombay was taken up and decided against, as the prices were then rising. To the indebted peasantry, the revised settlement meant additional hardship which was one of the causes of the Deccan Riots of 1875. Apart from the other measures taken to relieve the lot of the peasantry about this time, the most significant step, from our point of view, was the enactment of the Bombay Land Revenue Code of 1879. Under this code, revenue on land is assessed according to the purpose for which the land is used, whether it is agriculture, or building or some other purpose. " The rate of assessment is arrived at empirically with reference to general economic considerations, and in practice is based on the actual rents paid rather than in any theoretical considerations of the net produce."§ The recent amendment (1939) to the Bombay Land Revenue Code has, in fact, definitely recognised rental value as the basis of assessment. It has also empowered the Provincial Government to revise assessments in any year in accordance with changes in prices.

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* Bombay Administration Report, 1872-73, quoted by Dutt, *op. cit.*, p. 52.

† Evidence of Goldfinch. Fourth Report of the Commons' Select Committee, 1853, quoted by Dutt, *op. cit.*, p. 53.

‡ Dutt, p. 59.

§ Indian Taxation Enquiry Committee's Report, p. 60.

Assessment under Mahalwari

In the Punjab.—Let us now turn to a review of the assessment procedure and policy in the Punjab.‡ The Punjab system aims at fixing a moderate revenue to be paid by each village as a whole. The basis of assessment has been what are called "net assets." The maximum revenue demand which was originally fixed at one-half of the net assets was reduced to one-fourth in 1928 and net assets were clearly defined for the first time to mean the estimated average annual surplus produce of an estate or group of estates after deduction of the ordinary expenses of cultivation. An elaborate procedure has to be adopted for determining in terms of money the value of the net assets. The practice is to calculate net assets on the basis of rents paid by tenant cultivators who usually pay a fixed share of the produce. These stimates are then checked up with reference to the cash rents prevailing in the assessment circle. The produce estimate* is based on several factors, such as the average acreage of all crops sown and matured, the average yield per acre of each of these crops, the average prices obtainable in the village and the actual share of the gross produce received by landowners. The net assets are thus calculated "upon landlords' rentals and not upon owner-cultivators' profits." The assessment for the circle having thus been determined, it is thereafter distributed village by village and for all the holdings, in due consultation with the landowners. Commenting on this elaborate system, the Bengal Land Revenue Commission observe : "Once flat rates are adopted for a whole village or for particular classes of land, the elaborate classifications of land and calculations of yield are rendered inoperative . . . There is a considerable difference between the theory and the practice of assessment, and a great deal of the elaborate inquiries and calculations is wasted."†

Basis of Assessment : a General Survey

It seems hardly necessary to describe in detail the systems in all the Provinces. We may, following the Taxation Enquiry Committee's Report, sum up the existing systems in the different Provinces as follows : " Except in British Baluchistan, the land revenue has ceased to present a portion of gross produce . . . In the U.P., the Punjab and the Central Provinces, the Government demand is theoretically based on an economic rent, but actually takes many other factors into consideration. In practice, the basis of assessment is very

‡ Based on the Report of the Land Revenue Committee, 1938.
* Report of the Punjab Land Revenue Committee, 1938, p. 7.
† *Op. cit.*, pp. 128-129.

much less than the economic rent, partly on account of the operation of tenancy laws, and partly on account of the deliberate moderation of Settlement Officers. In the case of Madras, the assessment is based on the net produce, that is, the gross produce *minus* the cost of cultivation . . . calculated on the assumption that all labour is hired and includes an allowance for the labour of the cultivator and his family . . . In Bombay the rate of assessment is arrived at empirically, with reference to general economic considerations, and in practice is based on the actual rents paid rather than on any theoretical calculations of the net produce."*

The present position, on the whole, has been, summed up by the Committee as follows :

" The basis of assessment is defined under present arrangements in a variety of ways, as the net produce, the net assets, the economic rent, the rental value and the annual value. Sometimes two or more of these mean the same thing, sometimes different meanings are attached in different places to one or the other . . . The original settlements which were based on a great variety of factors, such as crops and soil values, and the expenses of cultivation, have been replaced by resettlements, which are based mainly on prices and general economic factors. In the carrying out of these resettlements, an increasing degree of importance has been given to annual value as ascertained by records of leases and sales and other similar factors."† Since then, however, the Bombay Land Revenue Code (Amendment) Act, 1939, has considerably reduced this empiricism (i) by laying down that the term of settlement should not exceed 30 years except when a revision is, in the opinion of the Government, inexpedient ; (ii) by formulating rules for classifying the lands in a taluka into certain groups for the purposes of assessment ; (iii) by providing that " standard rates " for each group should be so fixed that the aggregate assessment on it should not exceed 35 per cent. of the previous 5 years' rental value and (iv) by laying down that the revenue liability should be determined from the aggregate to the detail with the help of the annawari classification. The Act also provided that increase in rental value due to improvements in the land effected by the holder should not be taken into account for the purposes of raising the assessment and, further, limited the enhancement in assessment to 25 per cent. on the total for a whole taluka or a group,

* *Op. cit.*, pp. 59-60.
† *Ibid.*, p. 85.

and 50 per cent. on that of a village, and survey number or sub-division.

The Incidence of Land Revenue

As a result of all these diversities in the methods and basis of assessment, the incidence of land revenue varies considerably as between the different parts of the country. The following table shows the incidence of revenue in different Provinces :

*Incidence of Revenue in Different Provinces.**

		Incidence per acre of total area.				Incidence per acre of cultivated area.			
		Permanently settled. (*a*)	Temporarily settled. (*b*)	Ryotwari (*c*)	Average for total area. (*d*)	Permanently settled. (*a*)	Temporarily settled. (*b*)	Ryotwari (*c*)	Average for total cultivated area. (*d*)
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Assam	(1936-37)	0 1 6	1 14 8	2 4 11	1 4 6	0 8 2	2 15 2	2 10 10	1 14 5
Bengal†	(1936-37)	0 9 2	0 12 5	1 15 1	0 11 3	0 14 9	1 4 0	3 1 10	1 2 0
Bihar	(1936-37)	0 4 5	0 10 5	......	0 4 10	0 7 5	0 14 8	......	0 9 5
Bombay	(1935-36)	......	0 9 4	1 4 10	1 4 1	......	4 0 ‡9	1 7 11	1 8 4
Central Provinces & Berar ...	(1936-37)	......	0 7 2	1 0 5	0 9 8	......	0 13 4	1 6 10	1 0 6
Madras	(1933-34)	0 10 8	......	1 15 1	1 10 3	1 1 9	......	2 9 10	2 4 11
N.W.F.P.	(1936-37)	......	0 5 9	......	......	......	1 4 7	......	......
Orissa	(1936-37)	0 1 1	0 10 9	0 9 5	0 6 4	0 2 2	1 7 4	0 14 2	0 12 8
Punjab	(1936-37)	......	1 6 7	......	......	......	1 12 7	......	......
Sind	(1935-36)	......	......	2 0 8	......	......	......	3 8 7	......
United Provinces	(1936-37)	0 14 6	1 2 2	......	1 1 10	1 6 6	1 14 9	......	1 13 11

* Statistics of the incidence of land revenue assessment dealt with in this table show only the average amount contributed by each acre of land or per head of population in each Province towards land revenue. They cannot be used for comparing the burden of land revenue on land in the different districts and Provinces as no valid comparison is possible without taking into account such factors as the nature of the soil, climate, facilities for irrigation, etc. *Vide* "Agricultural Statistics for British India, 1936-37," Table VI.

† Bengal Land Revenue Administration Report, 1936-37.

‡ Defective owing to incomplete data.

Whereas the above table gives the incidence per acre of total and cultivated area respectively, the Taxation Enquiry Committee's Report gives the average percentage figures of land revenue in relation to the rental value of the land in some Provinces and points to the very wide variations in these figures as between different areas.

Province.	*Percentage of land revenue to rent*
Bengal (10 districts only)	6·5 to 57·7 ; average, 21
Bihar and Orissa	12·5
Punjab (11 districts recently settled)	13 to 27 ; average 17·8 (before settlement) 19 to 36 ; average 25 (after settlement)
Bombay	17 to 50
Berar (2 talukas recently settled)	10
Madras	10·7 to 29

" As a consequence, it is impossible," says the Report, " to say what is the incidence of the land revenue upon the land."* This uncertainty as to both the basis of the assessment and the rate of assessment has rightly been regarded as one of the most objectionable features of the land revenue system in India.

The Taxation Enquiry Committee recommended that annual value defined as " the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family, and the return for enterprise," would be an appropriate basis of land revenue. In the case of rents controlled by Tenancy Laws or by custom having the force of law, or where the rent is fixed by the Settlement Officer, the Committee recommended that such rent be taken as annual value. This, they felt, would place the whole system on a scientific basis by allowing for all the expenses of cultivation, and if a uniform rate of 25 per cent. of the annual value was taken as the standard rate of assessment, the burden of land revenue would be fair and reasonable.

In this connection the question has often been raised whether land revenue is a rent or a tax. If it were a rent, there would evidently be no question of its burden, for by definition rent is a surplus over all the items of expenditure on cultivation. This controversy raises the further issue whether the State in India is the landowner, and whether State ownership of land has been a recognised maxim of Indian polity from pre-British times. These issues are almost insoluble. The facts of the case are conflicting, and no definite answer seems possible. The broad fact is, however, undeniable that land revenue ought to be, whatever it may have been in the past, a share claimed by the State with due regard to the taxable capacity of the party paying it ; it must be levied in accordance with the well-known

* *Op. cit.*, pp. 76-77.

canons of fair and equitable taxation. This implies, firstly, that uneconomic holdings should be exempt from taxation ; secondly, that the taxation on land should be on the principle of progression ; and thirdly, that there should be an elasticity about its burden as well as procedure in view of diverse climatic and price factors.

Recent Reforms

Various attempts have recently been made in the Provinces to modify the land revenue system in the light of these considerations. The most notable has been that made in recently-settled districts of the Punjab, where a greater elasticity is sought to be imparted to the land revenue demands by linking them up with prices of agricultural products. The land revenue computed according to usual rules is laid down as the maximum, but it is not to be paid in full unless the general price level of the chief staple products of the district during the two preceding seasons is as high as the computed price level. If the price is lower, a proportionate remission is granted. The Punjab Land Revenue Committee recommended as an experimental measure a plan whereby the land revenue demands could not only be lowered but raised, the maximum enhancement being limited to 50 per cent. of the rise in prices. They also recommended a substantial lowering of the land revenue demands ; all those paying not more than Rs. 25 as land revenue were to be charged only at 3/4ths of the standard rates. Further, the Committee suggested a reduction of 50 per cent. for all owner-cultivators paying land revenue upto Rs. 10 and a flat reduction of Rs. 5 for those paying between Rs. 10 and Rs. 25. For higher incomes, the Committee advocated a temporary surcharge beginning with 6¼ per cent. for those paying land revenue between Rs. 250 and Rs. 500 and ending in 25 per cent. for those paying more than Rs. 5,000. Measures for the imposition of a surcharge along these lines have been adopted in the U. P. More important from the point of view of ability are the agricultural income-taxes levied in Assam, Bihar and Travancore on a fairly progressive basis. Very recently the Government of Bengal have also been contemplating the imposition of an agricultural income-tax in Bengal.

On the whole, however, the wide disparities in the basis and rates of assessment, and also in the incidence of land taxation remain unaffected in the main, as no systematic attempt has been made to revise the entire system in accordance with the recommendations of the Indian Taxation Enquiry Committee which reported about 15 years ago.

III. The Tenancy Problem

We now proceed to consider the Tenancy Problem in India. We have already seen how as a result of the land revenue and land tenure systems introduced by the British in India, the old village communities decayed and the solidarity of the village was broken up. The land tenure system refers to the relationship between the Government and the landowner, and if the landowner himself cultivates the land, there is no further problem, except that of the relationship between the capitalist landowners and the agricultural labourers. The problem of tenancy arises when the landowner or zamindar lets out the land to someone else, who then becomes the tenant, on terms defined by contract or custom. The distinction between such a tenant and a mere agricultural labourer, though sometimes blurred in practice, is quite clear-cut conceptually. The latter receives a fixed wage and works under the supervision and control of the employer. He has no right to the land and is not directly concerned with the product. He merely does his allotted job in return for the wages, and there his responsibility ends. A tenant works on his own. He agrees to pay to the landowner a certain cash rent or, more often, a specific part of the produce. He utilises his own labour, also that of the members of his family, and may in busy seasons or otherwise as need arises, employ hired labour to assist him. The landowner may supply, besides the land, some capital and equipment ; often he supplies only land and takes no interest in actual agricultural operations. A tenant is thus not only his own manager, but also in part *entrepreneur ;* his reward fluctuates according to the crops he obtains and the prices they fetch. It is a remarkable fact that in India, in the zamindari as well as in many cases in the ryotwari areas, the owner does not cultivate the land himself, so that the problem of tenancy has become acute all over the country.

The emergence of this problem is due to the variety of causes. In the permanently settled parts of the country, the inevitable result of conferring proprietary rights on the old revenue farmers was the creation of absentee landlords and the degradation of the original holders to a position of semi-serfdom. In the U.P., for instance, the creation of Talukdars in Oudh after the Mutiny was dictated by political necessity irrespective of the rights of the mass of the peasantry. Nowhere in the whole land history of India, comments B. R. Misra,* "can a better example be found of how the fate of millions of people

* Misra: "Land Revenue Policy in the U.P." pp. 196-197.

is bound up with the political upheavals in the country." "The Government," he continues, "entirely for political considerations, subordinated and sacrificed the interests of the millions to the interests of the few." In the Ceded as well as the conquered Districts of Agra, early settlements were made with so-called zamindars without any proper survey or enquiry. The new zamindars who were recognised by the British had little respect for traditional customs and rights. Their chief aim was to realise as much revenue as possible lest their newly-got zamindari should be put to auction and sold off to others.* Therefore, attempts were made to correct the initial mistake by legislation and amore systematic recording of rights, but, broadly speaking, the results have been similar to those in Bengal—a multiplicity of proprietary and sub-proprietary tenures, tenancy of various grades and a host of rent-receivers and rent-payers between the zamindar and the actual cultivator. This sub-infeudation resulted in the neglect by all these classes of their true economic functions since all the new interests in agriculture, instead of trying in co-operation to raise the maximum produce from the land, sought to wrest the utmost from one another. The tenant in this situation was unreservedly at the mercy of the landlord and the relationship between the two came to be characterised by illicit exactions in kind and cash, "fines," rack-renting and eviction of the tenant without any just reason. In fact, in all zamindari areas, whether settled permanently or temporarily, the development has been along similar lines, so that a series of tenancy laws has had to be passed to afford some protection to the ryots.

(A) *Early Tenancy Legislation*

In Bengal.—The Court of Directors, while sanctioning the Permanent Settlement, had made it clear that its purpose was not to give the landlords a "blank charter" to exploit and oppress the cultivators. "We, therefore, wish to have it distinctly understood that while we confirm to the landlords the possession of the districts they now hold and subject only to the revenue now settled; and while we disclaim any interference with respect to the situation of the raiyats or the sums paid by them, with any view of an addition or revenue to ourselves; we expressly reserve the right, which belongs to us as sovereigns, of interposing our authority in making, from time to time, all such regulations as may be necessary to prevent the raiyats being improperly disturbed in their possession or loaded with unwarrantable

* Misra : "Land Revenue Policy in the U. P." p. 56.

exactions."* This was reaffirmed by them in 1819. Yet, it is clear that the actual rights of the cultivators were left unascertained at the time of the Permanent Settlement and were, in fact, allowed to be usurped by the zamindars.† By the notorious "Haptam" regulation of 1799, the zamindars were vested with wide and arbitrary powers of distraint. These powers were reduced in 1812 by Regulation V of 1812 known as the "Panjam," but what the zamindar thus lost he made up by the exercise of illegal power. "One regulation followed another," remarks M. Azizul Huque, "to help the landlords till one finds the breath-taking regulation that raiyats preferring litigation or groundless complaints against the zamindars were to be punished with fine and imprisonment."‡ There was at this time a long and utterly unrealistic, if not tragic, controversy among British administrators and jurists as to whether the Permanent Settlement did or did not mean that the zamindars were "absolute proprietors," and whether the Government could still claim the right to regulate the exactions of the zamindars from the cultivators. In 1819, the Court of Directors admitted regretfully "the absolute subjection of the cultivators of the soil to the discretion of the zamindars,"§ but nothing was done in the matter upto 1859, so that "feudalism on the one hand, serfdom on the other, were the principal characteristics of the land system of Bengal."¶ The ryots were "rack-rented, impoverished and oppressed," but "large areas of jungle and waste lands were brought under cultivation," and "the zamindars' margin of profit increased."** Legislative interference now became unavoidable. The Bengal Rent Act of 1859, which R. C. Dutt, no doubt wrongly called "the charter of the Bengal cultivators" divided the settled cultivators of Bengal into three classes.*** For those who held the lands at the same rents since 1793 it was enacted that the rental should remain unaltered for all time to come. For those who held lands at the same rents for 20 years, it was to be presumed that they had paid the same rents since 1793 until the contrary was proved; and those cultivators who had held lands for 12 years, were granted occupancy rights, their rents not to be raised thereafter except on specific and reasonable grounds provided in the law. Certain other powers exercised by the landlords, such as that of having any ryot of his arrested without proving a case against him, were also cancelled.

* Quoted by M. Azizul Huque, *op. cit.*, p. 226.
† R. Mukerjee: "Land Problems of India." p. 149.
‡ *Op. cit.*, p. 249.
§ *Ibid.* p. 252.
¶ Speech by the Lt.-Governor of Bengal in 1859 quoted by Huque, pp. 252-253.
** Floud Commission's Report, pp. 24-25.
*** *Op. cit.*, pp. 263-264.

But this legislation proved ineffective. As the Rent Commission of 1880 clearly brought out, the zamindars did their best to prevent a cultivator from becoming entitled to the occupancy tenancy through 12 years' uninterrupted cultivation. They employed various devices not only for enhancement of rents but also for ejection of old tenants and even various sorts of harassments. There was acute agrarian discontent and even riots. Another Tenancy Act was passed in 1885 "after years of hesitation and consideration,"* to remedy these defects. The two main objects of this were to extend the right of occupancy to settled cultivators, and to extend adequate protection to non-occupancy cultivators.† But even this did not help. "Rents went on increasing, on the doctrine of average rate on grounds of higher prices, to the maximum from 1885 to 1928, years of progressive increase of price throughout India. Still unsatisfied, the landlord succeeded in getting a price for recognition of all transfers which had been freely done hitherto."‡ The law again intervened in 1928 and made occupancy holdings transferable subject to certain conditions. It also provided that the landlord had the right of pre-emption to purchase the holding within two months of the sale at 10 per cent. over the sale price. The pre-emptive right which ought to belong to the occupancy ryot was thus vested in the landlord even though more than half a century had elapsed since the first tenancy law was enacted.

It is not our purpose to work out in detail the tenancy legislation of the last century and more. The point to note, however, is that the old policy of allowing "every point about which there could be any doubt . . . to settle itself in favour of the landholder and against the public"§ continued to the last. The other provinces such as the U. P., the Punjab, Bihar, Orissa, Bombay and Madras also passed legislation in the course of this period more or less on the model of the Bengal Tenancy Acts, dealing with the zamindars, talukdars and khots. But the results were everywhere the same and the law was too tender to the landlords to uproot the evils of tenure from the land system. As the Floud Commission recently summed up the position, "It is true that the successive provisions of the Tenancy Acts have endowed the raiyats with the practical ownership of the land. But *a large and increasing proportion of the actual cultivators*

* Huque, *op. cit.*, p. 264.
† Dutt, *op. cit.*, p. 461.
‡ Huque, *op. cit.*, p. 270.
§ Report 1871-72, quoted by Huque, *ibid.*

have no part of the elements of ownership, no protection against excessive rents and no security of tenure."*

(B) Recent Tenancy Reforms

In spite of all the legislation since 1859, the defects of tenancy continued as the law found it difficult to limit the landlord's rights and powers which had been propped up for a long time by statute as well as by judicial interpretation. Moreover, several factors were all the while at work which made the problem more complex and more acute sooner than the law could cope with. These factors have been : the rapid growth of population which meant increasing pressure on the land ; the growth of a money economy, which led to extensive alienation of land from the agriculturists to non-agricultural classes ; the de-industrialisation of the country-side because of the peculiar nature of the economic transition in India ; and the prestige attaching to the ownership of land, combined with the notion that actual work on the land was degrading, which led the well-to-do classes to invest in land and become absentee landlords. As a result of all these factors, it is not unusual for an erstwhile owner to sell off his land to a money-lender and thereafter to go on bended knees to him asking him to be allowed to cultivate his old plot of land on terms which are necessarily unfavourable to him.† This fact of the divorce of ownership from cultivation coupled with the excessive pressure on soil led to a rapid rise in the number of functionless intermediaries who saw in the growing helplessness of the tenant a way to strengthen their own position without making any contribution of their own to the maintenance or improvement of the productivity of the land. Dr. Radhakamal Mukerjee‡ has given us a fairly detailed account of these complicated chains of proprietary and sub-proprietary rights. More recent studies have confirmed the existence of the same. In spite of all the legislation since 1859, there has been a progressive increase in sub-letting and transfer of land in Bengal. As the Floud Commission Report sums up the situation : " The Census figures show an increase of 62 per cent. (in the number of rent-farmers) between 1921 and 1931,

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* *Op. cit.*, p. 39 (italics ours).

† *Cf.* " To a very great extent, the cultivator in India labours not for profits nor for a net return, but for subsistence. The crowding of the people on the land, the lack of alternative means of securing a living, the difficulty of finding any avenue of escape and the early age at which a man is burdened with dependents, continue to force the cultivator to grow food wherever he can and on whatever terms he can. Where his land has passed into the possession of the creditor, no legislation will serve his need ; no tenancy law will protect him ; for food he needs land and for land he must plead before a creditor to whom he probably owes more than the total value of the whole of his assets. That creditor is too often a landlord of a different class, who has no natural or historical connection with his estate and is only interested in the immediate exploitation of the property in his control."—Report of the Royal Commission on Agriculture, p. 438.

‡ "Land Problems of India," p. 90.

and since 1931 there has been a further process of sub-infeudation below the statutory raiyat, which will swell the figure still more. At the same time, steady reduction is taking place in the number of actual cultivators possessing occupancy rights and there is a large increase in the number of landless labourers. Their number increased by 49 per cent. between 1921 and 1931. They now constitute 29 per cent. of the total agricultural population, and the next census will show a considerably larger increase."*

It is also noteworthy that the same problem arises even under the Mahalwari and Ryotwari systems, where we should ordinarily expect the landholder to be also the cultivator. Thus, in the Punjab, 7.3 per cent. of the cultivated area is farmed by occupancy tenants and about 48.2 per cent. by tenants-at-will. The Punjab Land Revenue Committee records the general census of opinion among its witnesses that " the ordinary tenant with one or two ploughs does not often earn more, and may in places earn less than the permanently hired agricultural labourer"† As to Sind, it is reported that "the peasant population having ownership rights over land is comparatively non-existent in the province,"‡ that, "out of about one crore acres of land available for cultivation, at least half is held by a little over 1,000 zamindars and jagirdars, while nearly two lakhs of khatedars, that is, peasant proprietors, have among them only about 30 lakh acres of land." This unequal distribution of the ownership of land implies the divorce of ownership from cultivation and indicates correspondingly the magnitude of the tenancy problem. In Bombay, apart from the Talukdari and Khoti tenures which are of the nature of zamindari tenures one-third of the cultivated area belongs to landlords who receive rents without directly or indirectly taking part in the cultivation.§

On the whole, therefore, taking the zamindari as well as ryotwari areas together, it is probable that about 75 per cent. of the cultivated area in India is cultivated by tenants with varying degrees of rights and liabilities. The rents paid by these tenants are in most cases exorbitant, and they are often required to render a variety of personal services of a semi-feudal type to the land-owner. The practice of crop-sharing prevails over a large part of the country. Although this system may have had its advantages in early days, at present it leaves hardly a subsistence income to the tenant.

* *Op. cit.*, p. 87.
† *Op. cit.*, p. 84. The report also points out that about 61 per cent. of the cultivated area of the Province belongs to only 15 per cent. of the owners.
‡ *Vide Eastern Economist*, June 25, 1942, " Agrarian Reforms in Sind."
§ Land Revenue Administration Report, Bombay, 1936-37, App. V.

As may be expected, when the popular ministries assumed office under Provincial Autonomy, one of the major items of reform they took up was tenancy. The main objects of these tenancy legislations have been : (1) to put a limit on the permissible enhancement of rents ; (2) to prevent arbitrary ejectments ; (3) to confer what are called occupancy rights on tenants so as to make lands heritable and sometimes alienable ; (4) to place restrictions on the right of distraint for arrears of rent and to grant exemptions in case of attachment, in respect of cattle, tools and seeds ; (5) to provide that suspensions of land revenue should also benefit the tenants through suspension or reduction of rents ; (6) to provide for compensation to the tenant for any improvements he may make on the land ; (7) to protect the tenant from "veth" and other burdensome impositions, etc Attempts have thus been made by a series of legislative enactments to rectify the errors of the early land settlements, which were aggravated by a number of economic factors operating during the last seventy-five years or so.

Let us review these briefly.*

In Bengal.—The acuteness of the tenancy problem in Bengal in spite of all the earlier legislation has been commented upon above. The Bengal Tenancy Amendment Act of 1938 (i) abolished the transfer fees payable to the landlord and the latter's right to pre-emption in the case of sale of occupancy holdings ; (ii) suspended the provisions of the earlier Act regarding enhancement of rent ; (iii) reduced the rate of interest on arrears of rent to 6½ per cent. and took away the landlords' right to recover arrears of rent by the summary process of auctioning the lands ; (iv) declared *abwabs* illegal ; (v) declared that all usufructuary mortgages on occupancy holdings entered into before the Amending Act of 1928 would expire at the end of 15 years, when the holdings would thus revert to the ryot, and (vi) conferred certain rights on tenure-holders and under-ryots.

There were further amendments of the Act in 1939 and 1940. The former aimed at preventing certain fraudulent practices in respect of enhancements of rent ; the latter was designed to give further protection to mortgagors. Thus, the Bengal Tenancy Amendment Act of 1940 provided, *inter alia,* that (i) all usufructuary mortages entered into before 1928 and subsisting on or after 1st August 1937, and other mortgages entered into after 1928 and before 1940 shall expire after the period of their duration or after 15 years, whichever

* For this review, use has been made of Mr. D. K. Malhotra's Note on "Tenancy Reforms in India," kindly placed by him at our disposal in MS. form.

was shorter ; (ii) no mortgage other than a complete usufructuary mortgage involving possession of land and entered into by occupancy ryots shall have any force or effect after the commencement of the Act; (ii) the Court may reopen any transaction relating to mortgage to ascertain whether the mortgagee has realised from land the original principal along with interest at 8 per cent. per annum, and, if the court is satisfied that he has, it may order restoration of the mortgaged property to the mortgagor.

While these reforms have given some protection to occupancy tenants and under-ryots, they have done nothing for the Bargadars, or crop-sharers, who are mere tenants-at-will. The hard lot of the Bargadars under the iniquitable system of crop-sharing prevailing in Bengal has been pointed out by the Bengal Land Revenue Commission, and it is admitted on all hands that this is a complex problem for the law to deal with. The Commission recommended the grant of limited occupancy rights to these crop-sharers and suggested that the share payable to the lessor should be reduced from one-half to one-third.. Even if this is done, the rent thus payable would amount to 5½times as much as is payable by the ryot and 2-2/3 times that payable by the under-ryot.* The whole problem is thus one which necessitates a readjustment of the very basis of Bengal's rural economy.

In Bihar.—The following measures have been passed in Bihar, another large zamindari area : (1) the Bihar Tenancy Amendment Act, 1937 ; (2) the Bihar Tenancy Amendment Act, 1938 ; (3) the Bihar Restoration of Bakasht Lands and Reduction of Arrears of Rent Act, 1938 ; (4) the Chota Nagpur Tenancy Amendment Act, 1938 ; (5) the Champaran Agrarian Amendment Act, 1938 ; (6) the Bihar Tenancy Amendment Act, 1940, and (7) the Chota Nagpur Tenancy Amendment Act, 1940.

The first two Acts mentioned above (i) cancelled all enhancements of rents between 1911 and 1936 ; (ii) reduced all rents commuted between those years in proportion to the fall in prices ; (iii) limited the rate of interest chargeable on arrears of rent to 6¼ per cent ; (iv) granted the right of transfer to occupancy tenants ; (v) conferred occupancy rights on under-ryots who had held the same land for 12 years; (vi) abolished the *salami* payable to the lanlord,† etc.

* Dr. Gyan Chand's paper on "Share Tenancies," read at the Fourth Conference of the Indian Society of Agricultural Economics.

† *Cf.* Paper on "The Recent Tenancy Legislation in India," by A. C. Bhatia and V. K. Chopra. Proceedings of the First Conference of the Indian Society of Agricultural Economics.

The third Act mentioned above provided for the restoration to the ryot of the lands sold during the depression in execution of a decree of arrears of rent, and for the reduction of the arrears of rent in view of the needs and circumstances of the ryot affected by the fall in prices. The Chota Nagpur Tenancy Amendment Act removed or relaxed the restrictions on transfer of occupancy holdings in Chota Nagpur and their division by partition and distribution of rent, laid down conditions under which a reduction of rent on occupancy holdings could be demanded, and made provision to govern the realisation of arrears of rent, etc. The Champaran Agrarian Amendment Act cancelled all the "indigo enhancements." The last two Acts mentioned above introduced minor changes, such as relating to appeals to the Collector, etc.

While these measures have given considerable protection and relief to certain classes of tenants, the tenants-at-will working on a crop-sharing basis do not come under these provisions, so that the position of tenants-at-will is similar to that of Bargadars in Bengal. The seriousness of the problem thus remaining to be solved may be seen from the fact that about 20 per cent. of the cultivable area of the Province is cultivated by such share-croppers having no legal protection.*

In U. P.—A very material change in the law governing the relation between landlords and tenants has been introduced by the U. P. Tenancy Act of 1939. This Act unifies the Tenancy Laws of the two Provinces of Agra and Oudh, and is a very comprehensive measure containing provisions with regard to *sir* lands (i.e., lands reserved by the landlord for his own use), devolution, transfer, extinction, merger, division and exchange of tenancies, determination and modification of rents, ejectments, arrears of revenue, profits, etc. The main provisions of the Act are : (i) it reduced drastically the amount of *sir* land which the landlord could retain ; (ii) certain classes of *sir* lands ceased to be such, and the tenants became hereditary tenants, subject to certain provisos ; (iii) within five years, the rents would be brought down to the level of those prevailing between 1895 and 1906 ; (iv) thereafter, no revisions would be allowed for 20 years, save under exceptional circumstances ; (v) the rate of interest on arrears of rent was reduced to 6¼ per cent ; (vi) the rules regarding ejectment and distraint have been tightened up ; (vii) several other benefits were conferred on tenants, such as the right to plant trees, to make improvements and build a dwelling house on his holding.

* From Dr. Gyan Chand's paper referred to above.

The Act has come in for a great deal of criticism, and has been labelled as "expropriatory." It undoubtedly diminishes the privileges of the landlords seriously, and is, on the whole, a radical measure. However, the U. P. is not free from the evils of share-cropping and agrarian discontent still remains a major problem yet to be solved.

In C. P.—The history of tenancy legislation in the C. P. follows a somewhat different path. Whereas the method adopted in other Provinces was one of giving protection against eviction or enhancement of rent to those who had been in cultivating possession of the land for a fixed period of time, the C. P. Tenancy Act of 1898 adopted the more direct method of protecting the actual cultivating-tenant as such.* That Act also made the rights of the occupancy tenant as well as the ordinary tenant inalienable. In 1920, the distinction between occupancy and ordinary tenants was abolished. Thus, in C. P., there was even before the recent tenancy legislation of 1938 and 1939, the least variety and diversity of forms of tenure, and the protection of the peasantry was more effective than in other Provinces.† The Amendment Act of 1938 prohibited, on pain of fine, the employment by any landlord of his tenant or a member of the tenant's family without proper payment, thus penalising *begar*. The Amendment Act of 1939 sought to incorporate the recommendations of the Revenue Committee appointed by the C. P. Government in August 1938 to propose changes in the existing tenancy and revenue systems with a view to their overhaul on well-considered and comprehensive lines. By the main provisions of the Act, (i) absolute occupancy tenants were given the right to transfer any right in their holdings without reference to the landlord by simple mortgage, to sublet for a period not exceeding five years and to bequeath the holdings. In the case of transfer by sale, notice must be given to the landlord, who had the right of pre-emption ; (ii) occupancy tenants, as distinguished from absolute occupancy tenants‡ were also given similar right of transfer, subject to the right of pre-emption of the landlord ; (iii) all tenants, other than sub-tenants were given the right in all trees in their holdings, and also the right to fell and take timber, etc., from the holdings ; (iv) a sub-tenant may be declared an occupancy tenant if a land is habitually sub-let. This last is a very useful provision which can

* D. R. Gadgil : "Industrial Evolution of India," pp. viii-ix.
† Article by D. R. Gadgil : "Tenancy Laws in India," *Servants of India*, March 23, 1939.
‡ Absolute occupancy tenants are those or heirs of those who had been recorded as absolute occupancy tenants in any record of rights before 1884. All other tenants (except sub-tenants) are occupancy tenants. The Revenue Committee of 1938 found that the former type of tenure was dying out, so that the main object of the legislation was to give wider powers of transfer to occupancy rights.

effectively keep in check any large extension of the class of sub-tenants who are mere tenants-at-will.

In Madras.—We have already referred above to the fact that about one-fourth of the lands in the Madras Presidency came under the Permanent Zamindari system as a result of the Settlement of 1802, and that it was found necessary in the second half of the nineteenth century to undertake legislation along the lines of the Bengal Tenancy Act of 1859. The Madras Estates Land Bill of 1908 was intended to undo the mischief that had been done by the Rent Recovery Act of 1865, and to declare the rights of the cultivators and the land-holders in a clear and unambiguous manner. The Act as it was passed, however, failed to grant the necessary protection to the tenants. When the Congress Ministry assumed office, it took up the question of tenancy reforms in the zamindari and other proprietary areas and appointed for the necessary preliminary investigation a Committee to go into the matter carefully and make recommendations as to suitable legislation. The Report of this Committee,* published in 1938, gives the following conclusions :—

(i) That the zamindars were really rent-collectors and that the ryots were the real owners of the soil.

(ii) That the Permanent Settlement fixed not only the *peshkash* which the zamindar was to pay to the Government but also the rent which the ryot was to pay to the zamindar.

(iii) That in subsequent years the zamindars who were mere tax-gatherers receiving a remuneration—about one-third of the tax collected—for this service converted the land-tax into rents payable to themselves and enhanced these rents from time to time, also levying at the same time several illegal dues and claiming several rights incidental to ownership of the land.

Accordingly, the Committee recommended :—

(i) That the Estate Lands Act of 1908 must be replaced as a whole because the changes we propose are fundamental and it will be impossible to make any amendments to the Act as it is.

(ii) That a declaration should be made in the new legislation that the rates of land revenue fixed in the year previous to the Permanent Settlement constitute fair and equitable rates of land assessment.

* The Madras Estates Land Act Committee, referred to briefly as the Prakasam Committee. The conclusions and recommendations given below are those of the Majority Report.

(iii) That permanent pattas with rates of land revenue fixed permanently at the pre-settlement rates should be given to the ryot by the landholder for the whole of the land.

(iv) That it must be declared that the ryot is entitled to enjoy all the natural facilities including grazing of cattle, collection of green manure or wood for agricultural purposes.

The Report then went on to suggest a draft Bill to embody these recommendations and the Madras Legislative Assembly after a lengthy debate adopted the general principles of this Majority Report* and recommended to Government the immediate introduction of a Bill to give effect to the same.

The Bill met with vehement opposition and could not reach the Statute book. No attempt has been made to deal with the tenancy problem in the ryotwari areas of the Province. Even in regard to the attempted reform in respect of zamindari and proprietary estates, it must be mentioned here that the line of action taken by the Majority was narrowly legalistic and conservative. For them, the Permanent Settlement was sacrosanct, and the changes they suggested were sought to be justified in terms of what, in their view, the objects and intentions of the Permanent Settlement were.† Hence, all that they recommended was a reversion to the *status quo* before 1802, without realising that such reversion would now mean most fundamental changes in the interpretation of legal and financial liabilities of the ryots to the zamindars. The fact that the ryots on whom the right of ownership was to be conferred were not necessarily actual cultivators but only rent-receivers was entirely lost sight of. On the question of the rights of the sub-tenants, the Committee gave no opinion at all, and this major omission meant that the cultivator as such was left out of the picture. And, lastly, as to the adoption of the pre-1802 assessment as equitable rent, this clearly amounted to a refusal to go down to fundamentals and to lay down principles governing the determination of fair rents. Since, however, the Bill was dropped, nothing more need here be said about it except that the problem of tenancy in the zamindari as well as ryotwari areas in the Province is one that will have to be tackled seriously in the near future.

In Bombay.—The first Act passed to give any real protection to the ryots was the Bombay Small Holders' Relief Act of 1938, which

* Some of the members who wrote dissenting minutes were in favour of the State purchase of zamindari and the introduction of a new settlement along ryotwari lines.

† *Vide* articles on "Zamindari in Madras," *Servant of India*, December 8, 15 and 22, 1938, and Mr. Shivaswamy's article on "The Madras Zamindari Report," in the same journal of 29th December 1938.

was a temporary measure to be in force up to 31st March 1938*, by which time it was expected that another Act, more comprehensive, would be passed to deal with the entire problem. Under that Act, the landlord was prevented from evicting a tenant who was in uninterrupted possession of agricultural land from 1st January, 1932, provided the tenant paid the landlord rent for one previous year. It was also laid down that concessions in land revenue due to suspension or remission were to be proportionately passed on to the tenant by way of reduction in rent.

More important, however, is the Bombay Tenancy Act of 1939, which has been put into force in a few selected areas in the Province. The Act creates a class of "protected tenants"† and confers on them the following benefits :—

(i) Reasonable rent to be determined by the Mamlatdar in accordance with a specified procedure and certain definite principles, unless it was settled by agreement between the landlord and the protected tenant or was determined by local usage.

(ii) Freedom from eviction except where the protected tenant (*a*) fails to pay arrears of rent within four months of the enforcement of the Act, or (*b*) fails to pay rent in any year within 15 days of the payment of land revenue by the landlord, or (*c*) causes injury to the land, or (*d*) sublets it and does not cultivate it personally or (*e*) uses it for non-agricultural purposes. It is, however, provided that the landlord can terminate the tenancy if he desires to cultivate the land personally.

(iii) Compensation for improvements on the land in case of eviction.

(iv) Continuance of tenancy after death on the same terms and conditions.

(v) Benefit of partial or total remissions of land revenue, by way of proportionate reductions in rent.

(vi) Freedom from *veth* or illegal cesses.

The Act is, on the whole, a bold measure designed to confer substantial rights on the tenantry. It attempts at the same time to safeguard the legitimate interests of landlords. In fact, the legal sanction given to rents determined by " local usage " has been criticised on

* Later extended upto 31st March, 1941.

† A " protected tenant " is defined as one who has land continuously for a period of six years immediately preceding 1st January, 1938, and has cultivated it personally. Tenants evicted after 1st April, 1937, were also to be deemed protected tenants on certain conditions.

the ground that the criterion is too vague and the provision may in practice work to the detriment of the tenant. Moreover, since the continuous occupation of land for a certain number of years in a condition precedent to the accrual of tenancy rights, there is a possibility of the lanlord managing to shift the tenants to different holdings or of removing them altogether before they become entitled to the permanent status. In this respect, the example set by the C. P. legislation of granting this protection irrespective of the period of tenancy would probably have been worthy of emulation. There is also no provision for automatically safeguarding the rights of tenants in future with the extension of the practice of tenancy. Even such benefits as have been granted under the legislation have been further limited in scope because of the enforcement of the Act only in a few selected areas of the Province.

Review of Tenancy Legislation

The above survey of tenancy legislation testifies, on the one hand, to the seriousness of the tenancy problem in all parts of India,* and, on the other, to the complexity of it which makes an easy solution out of the question. Tenancy legislation in all the provinces where it has been enacted has generally aimed at granting the benefits of the three F's—fixity of tenure, fair rents and free transfer—to tenants. As a result of these protective measures, the privileges of the landlord have been considerably curtailed, but the benefit of the same does not reach the actual cultivator, who is often a mere tenant-at-will or a share-cropper whom the legislation does not take into account. Radical tenancy legislation would involve dispossessing the old vested interests; and this, as experience shows, is always a difficult matter. On the whole, however, there is a fairly general consensus of opinion that the agrarian problem cannot be solved unless the functionless and parasitic landlord system is abolished, or at least controlled and transfers to sub-tenants are effectively checked, so that the actual cultivator is given a better legal status. At the same time, it is no solution to confer tenancy rights on small holders, since their cultivation cannot bring adequate returns and they cannot hold lands for long. Tenancy legislation, to be really effective, must embrace all classes of tenants, and it must, at the same time, disallow transfers or sub-letting of lands except with the specific permission of the District Magistrate, or any other duly constituted authority. Such

* Tenancy Legislation has also been passed in Orissa and Assam in British India, and is under consideration of Governments of some of the Indian States such as Baroda and Hyderabad.

permission may be granted whenever there is a legitimate case, as, for example, when the owner is leaving the village, or the land is transferred so as to enable the new holder to cultivate it jointly with his old holding on a more economical basis. In other words, the problem cannot be solved merely by preventing the grosser abuses of unprotected tenancy, but by going to the root causes of the growth of tenancy and making provision to see that lands do not pass from the hands of genuine cultivators to mere *rentiers* on the one hand and ill-equipped sub-tenants on the other who simply cannot utilise them on an economical basis. Thus tenancy legislation is only a palliative, not a cure. The agrarian problem is too intricate to be solved by tenancy legislation alone. What is needed is an overhauling of the whole system of land tenures, tenancies and taxation and the absorption of the large surplus of population on the soil in suitable rural and urban industries. Lines along which these reforms may be undertaken are indicated in Part III of this work.

CHAPTER IX

THE SIZE OF HOLDINGS

NEXT to tenures, the most important factor which affects the character of and returns from farming is the size of holdings or of cultivation. India is predominantly a country of small farms, too small, as is well known, spread all over the country. There are, however, a few large-sized farms but most of these are associated with plantations for tea, coffee, and rubber which are in the hands mostly of European owners.

I. ESTATE FARMING

During the Company's rule attempts were made to acquire large blocks of land for the cultivation of cotton for British mills, but the idea was not favoured by the authorities in India on political grounds. Since the Mutiny, as a protection against future risings of a similar nature, we have it on the authority of Thompson and Garrat,* that attempts were made to settle retired British civil and military officers on tea, coffee and rubber estates in the Himalayas and the Nilgiris. Special concessions were given to them to acquire land and advances were granted in the shape of seeds. This led to the creation of a number of estate farms or plantations. Later on Indians also took advantage of these openings and acquired some lands.

* "Rise and Fulfilment of British Rule in India," p. 474.

On the plains where irrigation facilities were extended as in the Punjab, Sind and U.P., large blocks of lands were given to both Indian and European colonists, and some of these farms were still in operation. In some cases waste lands were acquired, and estates built up, such as Sir D. Hamilton's Estate in the Sunderbans, and entirely new colonies were created at a considerable cost. In recent years, the Government of Bombay have adopted a new procedure. When the waters from the Nira canal were not used by the cultivators in the territory and the projects were failing, they acquired some 6,000 acres of lands and leased the same to a sugar syndicate. Since the grant of protection to the sugar industry, some eight or nine cane farms with sugar factories have been established in the Deccan. They have purchased or leased large blocks of land for sugar cultivation by modern capitalistic methods. Some persons interested in fruit farming have also been acquiring lands in large blocks and making experiments in large-scale farming. Most of these are men with capital and are in a position to make use of the modern scientific methods manures and machinery and introduce new varieties of crops.

We have no authentic information regarding the ramifications of estate farming in India, the number of such farms, their size, method of work and the results to the owners as well as to their tenants and wage labour. But from the information available mostly in the *Indian Farming,* the estates may be divided into two categories :

(1) Estates owned and operated by individuals or a syndicate or a joint stock company. On these hired local labour is employed for all operations, and expert engineers, agricultural graduates and trained supervisors from the cities of the country side constitute the superior staff. Modern machinery and chemical fertilizers are utilised extensively. Here owner or manager usually lives on the estate and supervises the operations. This type is represented by the Deccan sugarcane estates and the tea estates on the hills.

(2) Estates owned by a single man or a corporation, where lands are, however, parcelled out to permanent or semi-permanent tenants, who are given every facility to improve their position. Housing accommodation, improved seeds and manures and facilities for the processing and the marketing of produce are provided. The tenants have also the benefit of services in the shape of education and health. In these respects, Sir D. Hamilton's estate at Gosaba is an excellent example.

The method of operation of some of these estates is described in the Appendix at the end of this chapter. As regards the results achieved, there can be little doubt that large-scale capitalist farming must give, on the whole, better results than can be obtained by small, ill-equipped farmers working on tiny and scattered plots. These estates use the best available scientific methods, and their yields are definitely higher than the average yields roundabout. They are also able to afford fairly good social services for the labouring population. Where tenancy is in operation, the tenant is afforded excellent facilities for the marketing of his produce, and he is on the whole, in a better position economically in spite of the practice of crop-sharing followed by some, than the ordinary farmers working on their own.

However, it does not appear that their yields are better than can be obtained by the best cultivators in the locality. An economic holder well qualified by tradition and practice can get at least as good a yield on his lands as these estates. It has been estimated, for example, that in the Baramati district under canal irrigation the best of the cultivators is able to get 75 tons of cane per acre, while the average for the estates is about 45 to 50 tons. This, however, compares favourably with the yield of the ordinary cultivator who gets from 30 to 35 tons. The men in the first category would be very few, hardly 5 per cent., in any locality. Thus, from the point of view of the national dividend, estate farming would seem to be pre-eminently better, and the tenant under this system would be better off than under individual farming especially as he gets a compact economic block of land to work on.

It would, however, be premature to conclude from this that a universalisation of estate farming would be the right solution of the problem of the economical utilisation of our land resources. It is, to say the least, doubtful if it is in the long run in the best interests of the cultivator to lease out most of his lands to an estate and become along with his family a permanent servant on the estate. The question has sociological as well as economic implications. By the application of science and capital to land, yields can be doubled or trebled, but there are also possibilities of capitalist exploitation if estate farming is carried on solely for profit. This has been the case in plantations, and the State has had to pass legislation in order to check the exploitation of labour on such plantations. Excellent results can probably be achieved where an estate is worked on a co-operative or

profit-sharing basis, and the object of the State or the estate-owner is to guide and help the operations on the farm so as to set a valuable example. Mr. Elmhirst's estate in Devon is an instance in point. There the tenants share in the profits and are provided with decent wages and other social amenities. Mr. Ford's estate in England extending over 3,000 acres is another instance of a project undertaken to prove that large-scale production is possible and desirable in agriculture both from the point of view of total yields as also the welfare of the farm tenant or worker. The main problem here is one of equitable distribution. We have also to see that we do not reproduce on the land all the undesirable features of modern capitalism, including insecurity of income and of employment, as were seen on the tea estates in the treatment of indentured labour. Possibly, estate farming, with suitable safeguards, may be found useful in connection with the large areas which may hereafter be reclaimed and which would require large capital resources, but as a general method of land utilisation, this form of organisation cannot be recommended under existing conditions.

We say "under existing conditions" because of our awareness of the difficulty of absorbing the large number of small holders who would thereby be thrown out of employment. The problem of finding suitable outlets for the existing surplus population on land is serious enough, so that even the constitution of fair-sized economic holdings presents a serious enough problem. To some extent, it is true that the workers thus released could be employed more remuneratively on the farm itself inasmuch as the application of science and capital would mean more production and, therefore, more employment. The recent trend towards a rationalisation of production processes sets up, however, a tendency towards the employment of fewer and fewer hands. This is really the old question : to what extent labour and capital are complementary and to what extent they are competitive, and one cannot say, without a more detailed enquiry and a wider experience, whether the one or the other tendency would predominate. If most of the processing of agricultural produce is done on the farm itself, and if by-products are used for suitable manufactures on the spot, as is done at Walchandnagar and at Ravalgaon, this problem of re-employing the small holders can be considerably alleviated. The proper combination of agriculture and industry in this manner offers a promising line of solution, for, on the one hand, it may enable the capitalists to offset the profits and losses from either and may offer on the other greater continuity and security of employment to the workers.

Even then, the main difficulty in the way of any great extension of estate farming would be to find men with the vision and enterprise so necessary for such undertakings. The combination of agriculture and industry in a suitable manner without creating the problems of labour discontent, insanitary housing, etc., is no easy task. These enterprises would have to justify themselves not merely in terms of larger profits through efficient management but in terms of better wages, conditions of work and living, and social services than are ordinarily available to the rural population.

Another solution of the problem of more economical cultivation would be co-operative farming. If a large number of small holders could be induced to form co-operative farming societies and to undertake cultivation on a co-operative basis, we could combine the advantages of large-scale farming with a wide diffusion of ownership. Considering the present situation, however, this line offers small prospects of success. Co-operation has hitherto been confined to narrow spheres of credit and marketing, and there are mutual jealousies among farmers which would come in the way of co-operative farming. However attractive, therefore, co-operative farming may appear at first sight, as a practical proposition, it is hardly workable under the present conditions. It is only when new leaders arise in the villages that development along these lines will be possible. This, as we argue in a later chapter, presupposes a wide-spread educational effort which would create among the rural masses a new spirit of mutual trust and co-operation. Success in this direction also depends upon the creation of the right kind of administrative machinery with a more active and sympathetic personnel that would inspire the men under their charge to work together for the common good.

To conclude this brief study of estate farming and its possibilities, we may say that while it promises better economic results, it also gives rise to new problems, particularly regarding the re-employment of workers and labour welfare. These problems may prove soluble along the lines mentioned above. On the whole, it appears that it would probably be desirable to appoint an expert committee of enquiry to survey the existing estates, their yields, their methods and their general results and to assess their future possibilities in view of all the special conditions, geographical, economic and social, in the different parts of the country. Only thereafter a proper policy in this respect can be evolved.

II. Small Holdings: Sub-division and Fragmentation

Let us now turn to a consideration of the economics of small holdings which are the rule in this country and see what measures have been and may be adopted to counteract their worst evils.

One of the causes responsible for making agriculture an unprofitable industry in India is the sub-division and fragmentation of holdings. The pressure of population on the soil and the operation of the Hindu and Mohammedan laws of inheritance have resulted in the splitting up of a large portion of the cultivated land into holdings which fail to conform to any reasonable economic standard. The problem has two distinct aspects. The holdings not only tend to become small but the individual holdings tend to become broken up (fragmented) into a number of plots, often scattered over different parts of the village.

Sub-division of land occurs as a result of the sharing of ancestral landed property among the successors usually in accordance with the laws of inheritance. Thus a man holding twenty acres and having five sons, may be succeeded by them, each holding four acres of land. If these five sons have only two sons each, the next generation may show ten grand children with two acres each. This process of sub-division may be further complicated by voluntary transfers by sale, gift or otherwise.

Fragmentation refers to the manner in which the land is held by an individual (or undivided family). It consists of the splitting up of one holding into a number of separate plots separated by land in the possession of others. This is due to the custom arising out of the law of inheritance, and has its root in the desire to have an equal partition as between the heirs. Thus in the above illustration, if the man had the twenty acres of land in five plots of four acres each, it might be supposed that each son would take a plot. What may happen is that each plot is split up into five sub-plots of 4/5 acre each, and a sub-plot in each place assigned to each heir. The result is that the original 20 acres of land is split up into 25 sub-plots. Often the partition is effected in such a way that each sub-plot is a long narrow strip. This happens specially when lands are of different qualities and are situated in different localities ; those situated near the village site assume greater importance than those at a distance.

There are two types of landholders, (*a*) those who possess some permanent hereditary right in land, and (*b*) those who have no such

right, but who hold from generation to generation and even follow the law of inheritance in the division of a tenancy on the death of the holder. Many right holders do not cultivate at all and many more cultivate only part of their land and rent out the remaining portion to tenants at will. The result of this state of affairs is that sub-divided or scattered holdings are more pronounced among the cultivators than among right holders.)

EXTENT OF GROWTH

The number of cultivated acres per farmer and the average size of holdings in 1931 were as follows :—

Province.	*Number of cultivated acres per cultivator.*	*Average size of holdings in acres*
Bombay	16.8	11.7
C.P.	12.03	8.5
Punjab	8.8	7.2
Madras	5.99	4.5
Bengal	3.97	2.4
Assam	3.4	About 2
U.P.	3.3	6.0
Bihar Orissa	2.96	Between 4 & 5
Sind		38.7

The above is a reflection of conditions existing among permanent right-holders, but the position is aggravated by the fact that many of the smallest cultivators are really in the position of allotment holders cultivating tiny fields to eke out a bare existence.

Complete survey regarding the size of holdings in different provinces is not available, but non-official surveys made in villages in different provinces give an indication of the extent of sub-division and fragmentation. A special enquiry into 2,397 villages in the Punjab revealed that 17.9 per cent. of the owners' holdings were under one acre ; a further 25.5 per cent. were between one and three acres ; 14.9 per cent. between three and five acres and a further 19 per cent. between five and ten acres.* It is stated that in the Chhachh "the land is often divided into strips which are sometimes half a mile long and only twenty or thirty yards wide and each strip has a large number of holders."† In Bengal 46 per cent. of the families had less than 2 acres as shown in the following table‡ :—

* "Report of the Royal Commission on Agriculture," p. 182.
† M. L. Darling : "The Punjab Peasant in Prosperity and Debt," p. 84.
‡ "Report of the Land Revenue Commission," Vol. II, pp. 114-15, Table No. VIII b.

Size.		Percentage of families in the province owning size referred to.
(i) Less than 2 acres	..	46
(ii) Less than 2 and 3 acres	..	11.2
(iii) Less than 3 and 4 acres	..	9.4
(iv) Less than 4 and 5 acres	..	8.0
(v) Less than 5 and 10 acres	..	17.0
(vi) Less than above 10 acres	..	8.4

According to the Provincial Banking Enquiry Report, in the U. P. the majority of the holdings of the tenants were below the economic size. Dr. Mann found that in one Deccan village 156 owners had between them no less than 718 separate plots of which 423 plots were less than one acre and 212 plots were less than half an acre.* In Bombay, over 72 per cent. of the persons in 1936-37 had holdings below 15 acres but the aggregate area held was only 28 per cent. of the total occupied area of the province.† In Madras fragmentation has not proceeded as far as elsewhere, probably because the joint family system there has survived to a greater extent than in any other province. But a recent re-survey of some south Indian villages has revealed a deterioration in this respect. In one village, for instance, it was found that 170 ryots had 1,027 separate plots (1,658.10 acres) scattered in different places in 5 revenue divisions, each holding averaging 6 plots—a real difficulty for the cultivators.‡

The above illustrations do not present a complete picture of the position in the whole of India, but give a sufficient indication that the problem has assumed serious proportions.

Evils of Sub-division and Fragmentation.—The evil consequences of excessive sub-division and fragmentation of land may be stated as follows :§

1. They impede current cultivation and waste time.
2. They come in the way of permanent improvements of the land.
3. They handicap the cultivator from living on this farm.
4. They make any orderly organisation of labour or capital difficult.
5. They frequently result in second crops not being grown.
6. They sometimes throw land out of cultivation altogether.

* Mann and others : "Land and Labour in Deccan Villages," p. 48.
† Deduced from the Quinquennial Statement of Holdings in Government Ryotwari Area in Bombay Province for 1936-37 (Land Revenue Administration Report, p. 122).
‡ Thomas and Ramakrishnan : "Some South Indian Villages—A Resurvey," p. 340.
§ Keatinge : "Agricultural Progress in Western India," p. 71.

7. They cause enmity amongst neighbours leading to litigation and permanent feuds.
8. They produce a generally uneconomic situation.

As each generation enters into its patrimony, the extent of land that goes to the share of each heir diminishes, with the result that there is no steady and orderly development of the land.

CASE FOR CONSOLIDATION

The common remedial measure suggested for fragmentation is consolidation of holdings, which consists of a substitution by an exchange of land in compact blocks in place of isolated strips of land. The method was advocated as far back as 1880 by Sir Charles Cilliot and Sir Edward Buck. In 1908 the subject was once again raised by Shearer who explained the Japanese method of dealing with the question of the fragmentation of holdings.* The first public utterance on the subject was, however, made in 1912 at the opening ceremony of the Swadeshi Mela by Raja Pyari Mohan Mukerjee, who drew attention to the evil of hiring plots and fragmented holdings. About the same time, G. Keatinge, in his book "Rural Economy in the Bombay Deccan," examined the characteristics of "economic holdings" and the evils of sub-division and fragmentation. In 1913, the Report on Agricultural Indebtedness in the Baroda State,† suggested that consolidation of small and scattered holdings should be undertaken as a measure of primary importance for the improvement of agriculture. In 1915, Sir Bryce Burt, in a paper read before the Science Congress, pointed out that in other countries legislation had been introduced for realignment of holdings with a view to the economical and efficient cultivation of land. But he feared that "the advocate of restripping is looked upon as impatient idealist whose methodical soul is vexed by the present irregular boundaries." In 1916, in the Bombay Legislative Council, a resolution was moved for checking minute sub-division of agricultural lands which was taking place in different parts of the Province. It was, however, lost as the majority considered it impracticable to alter the Law of Partition. In 1917, the All-India Board of Agriculture drew attention of the Local Governments to the problem of fragmentation and recommended close investigation of the problem in consultation with the Registrars of Co-operative Societies with a view to adopting necessary remedial measures to suit local conditions. The Royal Commission on Agricul-

* "Agricultural Journal of India," Jan. 1908.
† By Sir Manilal B. Nanavati, then Registrar of Co-operative Societies, Baroda.

ture emphasised that consolidation of holdings into compact blocks was the only process by which relief from the evils of fragmentation was possible.*

MEASURES ADOPTED

Although consolidation of holdings as a method of combating the evils of fragmentation was mooted in different Provinces and States, it is only in the Punjab, C.P., U.P., and the Baroda State that practical measures have been adopted.

Baroda.—The Baroda State was the pioneer in taking measures for consolidation. The Report on Agricultural Indebtedness in Baroda State mentioned above made the following proposals :—

(i) Granting of facilities for voluntary exchanges of fields with a view to consolidation ;

(ii) The enactment of permissive legislation empowering Government to undertake redistribution of land wherever people are willing ;

(iii) The fixation of the lowest limit below which partition of agricultural land should not be recognised.

The above proposals were accepted by a Special Committee appointed by the State to examine them and were subsequently passed in the legislature. As a result, the limit of sub-division of holdings was raised from 1½ bighas of *jirayat,* and ½ bigha for *bagayat* or *kyari* land to 8 bighas for *jirayat*, 3 for *bagayat* and 1½ for *kyari* lands. Secondly, under the Consolidation of Agricultural Holdings Act, 1920, on the application of two-thirds of the *khatedars* of a village holding not less than half of the cultivated area, a scheme of consolidation was to be prepared, taking care to see that the new holdings are as far as possible equal in area and value to the old holdings, and providing for independent access to each field. Differences, if any, in the value of the original and the new holdings would be settled by cash payment, and the legal burdens transferred to the new holders. Further, by an Act of 1933, on the occasion of the sale of any land below the minimum limit of a holding (referred to above) the right of purchase was given to the holders of the neighbouring fields. In spite of these legislative measures it is reported that the results achieved are not satisfactory. From August, 1935, to March, 1938, only 1,518 survey numbers with an area of 6,200 bighas were consolidated into 435 survey numbers. The poor results are attributed to want of suitable staff, and to the Act being persuasive and not

* Report, p. 188.

compulsory. In addition to consolidation by legislative measures, voluntary exchanges through the formation of co-operative societies are encouraged. By this process, between 1926 and 1937, 1,336 members of 74 societies consolidated 11,427 blocks measuring 50,407 bighas with 10,188 blocks. The hindrances to consolidation through co-operative societies are : (*a*) indebtedness on a large scale ; (*b*) lethargic attitude of the people ; (*c*) sentimental attachment to land ; (*d*) want of adequate areas of the same kind of land for exchange ; (*e*) lack of adequate and persistent propaganda and (*f*) lack of efficient staff to carry out the legislative measures.

Recently, however, the restrictions on the minimum size of plots have been removed and the law of pre-emption abolished.

The Punjab.—Attempts at consolidation of holdings have been more successful in the Punjab than anywhere else. The success may be attributed to the homogeneity of the soil and the simple system of land tenure, but more particularly, to the realisation on the part of all concerned that fragmentation had reached very uneconomical limits. The consolidation of holdings in the Province is carried out through co-operative societies. The owners of land who desire consolidation of their holdings form themselves into a society, pool their holdings and prepare a scheme of rearrangement which must be accepted by at least two-thirds of the members. As far as possible, each owner is allotted as many compact blocks of land corresponding to the type of land held by him before consolidation and equal in value. With regard to this scheme, Darling says : " It is easy to chronicle these results but most difficult to produce them. For everyone has to be satisfied and all conflicting interests reconciled. The ignorant have to be enlightened and the stubborn conciliated. The poor, the weak and the speechless have to be as much regarded as the rich, the strong and the vocal. The only weapon is the tongue and the only means persuasion. Moreover, technical difficulties abound ; and underlying all is the peasant's passionate love of his land with the jealousy of neighbours that passion breeds. In such circumstances the work must be slow. The marvel is that it is done at all."* It goes to the credit of the Province that, with suitable staff sanctioned by the Government, more than a million acres, out of a cultivated area of 30 million acres, have been consolidated, as is shown in the statement on the next page. The consolidation was followed by an increase in the area under irrigation and extension of area under cultivation. It simplified the Government's work of maintaining village records,

* Darling : " The Punjab Peasant in Prosperity and Debt," p. 258.

Statement showing the Progress made by the Co-operative Consolidation of Holdings Societies in the Punjab since 1921.*

—	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Number of societies	60	107	133	154	174	237	314	428	543	654
Number of members	1,698	3,397	5,225	7,078	8,412	10,928	15,387	20,495	28,305	35,778
Area consolidated in acres per year ...	7,571	6,983	5,876	8,120	11,707	21,258	38,071	64,699	48,709	50,105
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cost per acre per year	...	0 12 5	2 1 4	3 0 6	2 2 9	2 8 10	3 5 1	2 7 2	1 12 0	2 12 10

—	1931	1932	1933	1934	1935	1936	1937	1938	1939
Number of societies	795	911	1,011	1,097	1,167	1,210	1,270	1,360	1,477
Number of members	47,948	55,803	67,992	78,319	89,429	103,584	119,875	141,929	160,782
Area consolidated in acres per year	72,821	60,348	62,062	56,148	63,534	92,689	120,295	132,813	157,211
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cost per acre per year	3 0 6	1 11 8	2 0 7	1 13 2	1 14 0	1 6 11	1 12 8	1 12 1	1 12 1

Total area consolidated upto 31st July, 1939 ... ... 1,066,221 acres.

Number of wells :—

(*a*) Sunk ... ... 4,865 + 11 water-courses.

(*b*) Repaired 841

* Proceedings of the first Conference of the Indian Society of Agricultural Economics, p. 47.

and let to an increase in land revenue. Years of experience in the process of consolidation through the co-operative movement revealed certain legal and other difficulties, and to overcome these the Punjab Consolidation of Holdings Act was passed in 1936. The Act enables two or more landowners holding a certain minimum area to apply for consolidation to an officer appointed by Government. Consolidation is undertaken by the officer if two-thirds of the landowners holding not less than three-fourths of the cultivated area agree to do so. By September, 1939, the operation of the Act was extended to seven districts, viz., Rohtak, Sialkot, Gujrat, Jhelum, Muzzaffargarh, Gurgaon and Mianwali. Up to the end of July 1939, an area of 1,066,221 acres was consolidated. The Government actively participated in the work and bore the cost of staff required for the purpose.

The United Provinces.—In the United Provinces the work of consolidation of holdings is done through the agency of co-operative societies, the expenses being borne partly by the Government and partly by the co-operative union. The land of the members is pooled together, realigned by an executive committee and approved by two-thirds majority of the members. In about 13 years, 67,000 bighas of land split up into 75,965 plots were consolidated into 7,599 plots. The cost of these operations worked out at about 11 annas per acre. The slow progress made in the Province is attributed to heterogeneity of the soil but more particularly to complexity of tenure, want of trained staff and paucity of funds.

The Central Provinces.—The Central Provinces initiated consolidation by passing the necessary legislation. The Consolidation by Holdings Act, passed in 1928, was applied to Chattisgarh division. The main principle of the Act is that when one-half of the villagers holding two-thirds of the land desire consolidation, a special officer prepares a scheme with the assistance of a *panchayat* and the scheme is submitted to the Settlement Commissioner for confirmation. Up to 1937 the holdings of nearly a lakh of permanent holders covering an area of about 1,133,000 acres and split up into 2,433,000 fragments, were consolidated into 361,000 campact blocks.

The other provinces and States appear to have shelved the question on the ground that consolidation will not meet with any success, that it is not a pressing problem, that the landlords are reluctant, or that the tenure of lands is complex.*

* In this connection reference may be made to the remarks of the Madras Provincial Economic Council, 1928, and the Bengal Board of Economic Enquiry, publication No. 7.

In other Countries.—In other countries, causes similar to those referred to above have led to excessive sub-division and fragmentation of land. To remedy these evils, attempts have been made to create and to maintain reasonably sized and reasonably situated economic holdings for peasant farmers through drastic legislation involving the principles of :—

(*a*) compulsory expropriation;

(*b*) compulsion on all concerned to accept restripment when a certain fraction of the landholders desire it ;

(*c*) subsequent indivisibility of reconstituted holding ;

(*d*) exemption of the reconstituted holding from seizure for debt ;

(*e*) not allowing the reconstituted holding to be combined with other.

As a result of such remedial measures, the value of land is said to have trebled in some cases, and to have increased over 60 per cent. in others, the general consensus of opinion being that yields of crops have increased, while the cost of production has been reduced.

CONCLUSION

The foregoing paragraphs show that excessive fragmentation of land is one of the heaviest handicaps for economic cultivation. This tendency is likely to be aggravated with the growth of population. So far, measures for consolidation have been taken in the Baroda State, the Punjab, U.P., and C.P., but the results achieved are not satisfactory except perhaps in the Punjab and C.P. What is surprising is that in some provinces, official opinion seems to be definitely lukewarm about consolidation. It is clear, however, that matters cannot be allowed to drift in this manner. The ultimate solution of the question is the creation of economic holdings. An economic holding can be defined in terms of so many acres of land only when several other factors, such as the amount and quality of labour and equipment to be used on the land, the quality of soil, rainfall, the kind of crops to be raised, etc., are assumed to be given. Conditions in several of these respects vary from region to region. It is not possible, therefore, to be dogmatic as to what constitutes an economic holding in the sense of a holding which would ensure the best possible results under given conditions of technique. There is little doubt, however, that an economic holding would be much larger than most of the holdings we now have. An attempt to create such holdings would involve displacement of labour, and this can be recommended only when there are alternative avenues of employment for such labour. This aspect of the problem deserves

careful consideration in any long-range scheme of agricultural planning.* Broadly speaking, the question is one of optimum size to be determined on a balance of advantages and disadvantages of large-scale and small-scale cultivation. As first step, it would be better to aim at the creation of holdings which are at least big enough to enable the peasant and his family to subsist fairly decently on the produce.

It may be pointed out here that the problem of countering sub-division is thus different from that of fragmentation. The latter can be solved by consolidation through co-operative societies, voluntary effort and education, propaganda and also, in the last resort, by judicious compulsion. For that purpose, some of the measures we have mentioned above as having been adopted in European countries deserve a serious trial. The problem of sub-division raises issues regarding surplus population and rural unemployment, and it cannot be solved without a comprehensive reconstruction affecting the land system as a whole. A discussion of the same is undertaken in Part III of this study.

APPENDIX

Walchandnagar (formerly known as Kalamb) is a big sugar farm of 16,000 acres, situated about eighty miles from Poona on the main line from Poona to Madras on the G. I. P. Railway. The factory is situated 30 miles from the railway station Diksal and is connected with it by the factory's own tramway line. Walchandnagar is a factory town with a population of about 2,500 souls and is situated in the rural areas. The farm is owned by a joint stock company, Messrs. Marsland Price & Co., Ltd., with Messrs. Walchand & Co., as their managing agents.

The Walchandnagar project has a paid-up capital of Rs. 13,50,000 and the total capital block amounts to Rs. 63,72,456. The area under sugarcane is 3,500 acres and the crushing capacity of the plant 1,50,000 tons. The salaries and wages paid amount to Rs. 10,30,080, and the excise duty Rs. 10,67,000. Nearly two thousand acres are put under food crops and vegetables to supply the army. The factory is growing from year to year. Besides the sugar factory, the estate includes allied industries such as a dairy, an oil mill, a soap factory, vegetable ghee plants, a power alcohol plant and a paper and pencil factory.

The dairy has 200 heads of milch cattle. The latest type of milk pasteurisation plant has been installed with a capacity of treating 1,100 pounds an hour though its maximum has yet to be utilised, for the dairy produces only about 1,800 to 2,000 pounds of milk per day. The balance of milk, after the colony has been supplied, is despatched to Bombay.

The oil mill was set up in 1939. It crushes groundnuts at present, and the groundnut cake is used for manuring the farms. An oil refinery and hydrogenation plant has also been installed since 1941 for the production of refined oil, vegetable ghee, etc. This is the first plant of its kind designed and manufactured by Indians in India.

* That it will not be sufficient for Government merely to refuse to recognise the claim of several heirs to a plot of land which is already small was brought out in a resolution by the Government of India on Caird's Report. That resolution rightly points out that such a step on the part of Government will not prevent all these heirs from remaining on the land so long as no alternative avenues of employment are opened out for them. *Cf.* Wadia and Joshi: "Wealth of India." p. 257.

The estate extends over fifty square miles and is well served by its own railway and motor transport. The total length of the railway line owned by the estate is 65 miles and it interlinks the various sections of the estate, and also provides the necessary connection to the Diksal station on the G.I.P. Railway main line. The company owns eight locomotives, a number of rail saloons, rail motor buses, wagons and a large number of trolleys. The railway transport is supported by a motor transport system which serves the areas not accessible by the railways especially from Baramati. The company owns a large fleet of buses using petrol, crude oil and coal gas, and some of these buses have been built entirely in the company's workshops.

There are about eight thousand labourers employed in the various sections of the factory and on the farm, and the number of skilled workers totals about a thousand. Well-ventilated *pucca* quarters house the staff. Hygienic conditions in the colony are secured by modern sanitation and underground drainage. A free dispensary provides both the Ayurvedic and the Allopathic treatment to the workers and their families. Besides a qualified doctor, there is also a qualified *Vaidya* in charge of the dispensary and it has indoor accommodation for twelve beds in the male ward and six beds in the female ward. The daily attendance in the out-patient department is about 200. Primary schools have been set up in various sections of the estate. There is also a secondary school. A fine building has been recently erected to house this school. Night classes for adult workers are frequently held. There is also a reading room and a library.

There is a sports club, housed in a special building, where facilities for various games are provided by the company and an open ground measuring over ten acres is specially set aside as a sports field. A *pucca* market hss been provided and another is under consideration. A few houses are also provided for casual visitors and serve as Guest Houses.

A noteworthy feature of the farm organisation is that the factory utilises every product produced there and all the processing of the raw material is conducted on the spot.

The Ravalgaon Farm in Nasi, district (Bombay Province) was started in 1928, with cotton and groundnut as the main crops, to which sugarcane, tobacco and fruit were later added. By 1929, an area of 1,000 acres was brought under cultivation ; tractors were employed for ploughing and other agricultural operations. The farm, however, was not paying till 1931 when sugarcane cultivation was undertaken under the stimulus of Government protection for sugar. In a short time the area under this crop was 1,400 acres, the maximum area possible with the water facilities available. To-day the farm extends to 9,000 acres of which 5,700 acres have been purchased, the remaining area being taken on lease. Under intensive cultivation the yield per acre rose from 33 tons in 1932-33 to 52.9 tons in 1940-41. In the latter year 1,08,000 tons of cane was crushed including 40,000 tons purchased from local cultivators who found the farm factory a ready market at fair price. The production of sugar increased from 31,085 bags in 1933-34 to 81,505 in 1942-43. The transport problem for such a vast farm was solved by the construction of 30 miles of tram line connecting the various sections of the farm with the factory and the main line running from the factory to the nearest town, Malegaon. One interesting feature of the transport is that Diesel tractors when idle, are utilised for haulage work of 100 to 120 tons. The sugar from the factory is transported to the markets at Manmad and Dhulia in the farm lorrie.

The utilisation of the by-products of the sugar factory forms an important feature of the farm. With the aid of the Imperial Council of Agricultural Research a section for making improvements in the manufacture of sugarcandy has been started. It is expected that when the present restrictions on sugar are removed it will be possible to develop a proper size candy factory. Confectionery is also manufactured. An order for ten tons of golden syrup has been obtained from the military as an experimental measure.

To provide for the oil-cake required for manure an oil mill has been installed, the machinery for which has been manufactured in India. While the cake is used for manure, the oil is refined ; in a short time it is hoped to produce vegetable ghee. Soaps and other toilets are also prepared from the waste products of the oil refinery.

The molasses from the factory are burnt directly in the special furnaces for heating steam boilers. This is said to be the only factory in India where molasses are burnt as a fuel without mixing with bagasse or any other substance.

The green cane tops are used as fodder for cattle in the dairy where pasteurized milk is produced and sent to outside markets such as Bombay. About 900,000 lbs. of milk is produced annually. Ghee is prepared from cream and casein (for making lactose and milk sugar) is prepared from skimmed milk.

The cane trash remaining in the field is utilised for the production of cardboard and rough paper. The filterpress cake can be used as manure, as fuel or turned into activitated carbon. The last product is utilised for making boot polish.

In addition to the above, attempts are being made to refine crude sulphur, and to manufacture starch and glucose.

For the workers and supervising staff, separate well-ventilated quarters have been constructed with facilities including electric lights. Free medical aid is also rendered.

The Coleyana Estate is situated on the lower Bari Doab Canal area of Montgomery district in the Punjab. The estate consists of 7,500 acres comprising seven main villages, each covering about 1,000 acres. A certain portion of the land is devoted primarily to raising fodder for the livestock. The rest is under commercial farming. The former is cultivated by paid labour while the latter is leased to tenants on rental of half *batai* (tenant and landlord sharing half and half in costs and produce). The labour required for the farm is usually found by the tenants from among the members of the family or friends.

The land was originally scrub jungle with much salt or *kalarati* land and had, therefore, to be cleared and levelled by the tenants before the land could be brought under canal irrigation. In accordance with the Punjab Colony Act, the Estate is laid out into squares of approximately 25 acres each, and the cropping consists of 10 acres of wheat, 7½ acres of cotton, and 7½ acres fallow for the following cotton crop. In this rotation wheat follows wheat in 2½ acres and this area is lightly manured for the second crop. In the fallow area, crops such as gram, *toria*, turnips may be grown, and 1½ acres per square per crop are allowed to be sown with fodder for the tenant's cattle. In view of the rainfall scarcity, the estate has entered into a contract with the Irrigation Department under which it pays a lump sum per annum for the water and distributes the water to the greatest good of all the land. Where-ever necessary agricultural operations are carried out by modern implements. The tenants have to use pure seed provided by the Estate. Compost manure is manufactured on the estate and supplied to tenants at one-third of the cost.

The average outturn for the last 20 years has been wheat 20 mds. and cotton 10 mds. per acre. With control of the water such crops as sugarcane and chillies are grown in blocks in each village. The estate effects all its sales through the Oakara Zemindars' Co-operative Society.

Co-operative farming is making a start in the block system of sowing sugarcane and chillies. An outdoor hospital has been started. A primary school has been started where emphasis is laid on agricultural education and animal husbandry. Silk-worm rearing is introduced among tenants. Weavers on the estate are helped to buy improved looms.

The Estate of the Bundi Agricultural Syndicate (Rajputana) was originally an uncultivated level plain, with a fairly heavy growth of trees *kikar* and *khejra*. The present area under cultivation is 1,800 acres. A tank (with the capacity of a thousand million cubic feet of water) was constructed to provide water for irrigation. The cultivation of sugarcane was started with doubtful hopes of success. The results of the venture are not known. Rice cultivation was started at a village called Garerda. Local labour was used for transplantation and harvest; in some cases labour was imported. The venture with rice seems to have succeeded with the result that it was decided to abandon cane-growing and to concentrate on rice.

The B. C. G. A. Farm at Khanewal (Punjab) was taken up in 1920, but certain portions were already under cultivation since 1914. No levelling, however had been done, so that low-lying portions only could be irrigated. Sandhills and jungle trees had to be cleared, and the tenants were given the land to be levelled

free of rent or share of produce. Government also assisted the colonists by remitting land revenue collections for two crops. This remission has been put aside as a separate fund for development work and assistance to tenants. The lambardar fee paid annually by Government for collecting the land revenue is also paid into this fund which stands at Rs. 50,000 at present. The area of the farm is 7,300 acres.

The crops depend almost entirely on canal water. The whole area of the estate is divided into squares of 25 acres, and a scheme of crop rotation is followed. At the centre of every 100 acres, there are plantations of ⅛ acre consisting of *shisham* and *kikar*, and the cattle are kept here. The trees also serve as a source of timber for implements and house repairs. At the villages a large-scale manure pit factory is in operation on the Indore lines. The farm is under tenant cultivation on the *batai* (half-share) system. Implements required for cultivation are loaned to tenants. The farm has been used extensively to test on a large scale new varieties of wheat and cotton. The farm had a major share in the introduction of 289F cotton. With Khanewal as centre the management has taken large areas on lease in the Punjab, Bahawalpur, Sind and Baluchistan, and now controls over 200,000 acres of irrigated land, and, besides, operates thirteen ginning and pressing factories and two large oil mills. The average yield of cotton is 12½ mds. and of wheat 20 mds. per acre, as against the provincial average yeidls of 4¼ mds. and 10 mds. per acre respectively.

As regards social welfare work, the tenants' houses are being rebuilt according to plan; a visiting doctor is employed and a dispensary established; trained midwives are employed. A fund has been started for tenant welfare.

The Military Farm at Okara (Punjab) comprises 22,040 acres and is an independent unit of the Indian Army. The project was started in 1914 as an oat-hay farm for army requirements. As the call on fodder reserves became less, the farm increased its agricultural activities and now produces crops like cotton, wheat, *toria* and mash for sale. The estate is managed on the one-half *batai* system. The chief aim of the farm is the production of pure seed, almost the whole of which is taken by the Punjab Agricultural Department. The whole area is canal irrigated and 18,525 acres are cultivated. Full use is made of green manure in the rotation programme and all the village manure is composted in a special manure factory attached to each village. Modern machinery is used for cultivation. All produce is sold through the local Zamindars' Co-operative Society.

The Indian Mildura Fruit Farms, Ltd., at Revala Khurd, (Punjab) was established in 1920 on 722 acres of land for the purpose of improving fruit-growing in the Province and to encourage commercial fruit-growing in the newly irrigated area by importing proved varieties of fruit trees and propagating from these. Plantation of vines for the production of dried fruit was attempted, but was not successful owing to attack of insect pests. Citrus cultivation is stated to have fared better. Other fruits grown are figs, plums, peaches, dates, loquats, mangoes, *phalsas* and *jamans*. The total area under fruit trees is over 500 acres. The crop is graded and attractively packed for the market. In addition to the sale of first-grade fruit, fruit squashes and tinned fruit are marketed throughout India and adjacent countries. It is proposed to utilise excess of skin and pulp for cattle feed.

The Shantinagar Land Colony, at Shantinagar (Multan, Punjab), was established in 1916 by the Salvation Army, on a virgin soil near a major canal. The object of the colony is to help the depressed classes. In the earlier stages, the yields were poor, but later on, with the introduction of improved varieties, insistence on proper manuring of fields, and the use of bteer ploughs, there has been improvement in crop production. A system of crop rotation has been working well. It is stated that "the colonists themselves in many cases give one the impression that life in them is worthwhile and it is evident that many have been transformed."

The Sir Daniel Hamilton's Estate at Gosaba (Bengal) was started in 1903. It comprises four islands of a total area of 22,000 acres in the Sunderbans of Bengal. The land was originally crisscrossed with numerous creeks and canals and the briny silt deposited by rivers made the entire area uncongenial for agriculture. Reclamation of land proceeded bit by bit and paddy crop was raised. People were at first reluctant to settle on the estate and those that had settled were in the grip of the *mahajan*. Arrangements were made for repayment of loan, and for the introduction of co-operative societies. An improved variety of rice was introduced. "The

large-scale farming of the estate has among its blessings the education of the cultivators in turning unproductive and partially productive tracts into good arable land, the timely and well regulated cultivation of fields, the cultivation of suitable strains of paddy in different types of land and the selection and preservation of good seeds." In addition to growing improved rice, seeds of successful vegetables are distributed free every year to the cultivators. Though the land is rich, green manure, farmyard manure and chemical fertilisers are used with success. In order to give impetus to "grow more food" movement, the estate holds a paddy-yield competition every year. The largest yield recorded in the competition is 17 mds. 38 seers of paddy per acre. Livestock improvement is also attempted, Sindhi stud-bulls are imported and their cross-breeds are thriving well. Cottage industries have been introduced, and a central weaving institute was started in 1928 for training in spinning, weaving, bleaching and dyeing, mixing of colours, *durrie*-making, etc. The preparation of lemon squash and tomato ketchup have lately been introduced on a commercial scale and the products have a good market in Calcutta. In 1918, a consumers' co-operative society was started to supply the people with their requirements at low rates. There is a central English Middle School where instruction is given with an agricultural and industrial bias, agriculture and weaving being compulsory. Basket-making and soap manufacture are also taught. Adult education, free circulating library, Bhartachari training and music are other important activities of the estate. At the Rural Reconstruction Institute, Gosaba, the young middle class *bhadralog* are given a practical course of instruction in village reconstruction.

The Pilibhit Estate (United Provinces) covers an area of 2,000 acres divided nto a dozen farms of different sizes, the biggest being one of 500 acres. On the bigger farms, agricultural operations are carried on by machines. Green, animal and chemical manures are used. Sugarcane cultivation is the main activity with ratoon and wheat as rotation crops. In river lands, however, sugarcane is grown year after year, the cost of production, except harvesting, being Rs. 125 per acre. The yield varies from 300 to 800 mds. per acre. Labour is said to be increasingly scarce and so labour-saving machines are used.

The Ingram Estate near Delhi, was formed about 1830 and now comprises some 18,000 acres. The greater portion of this area is rented out to tenants-at-will paying cash rents. The tract is one of precarious rainfall, and cultivation depends upon the Agra Canal which waters about 12,000 acres. Manure is collected in the villages and 12,000 tons of it put back on the land every year. Improved seeds play a large part in the agriculture of the estate. Improved seed is made available at sowing time on credit and its cost plus interest at 12 per cent. per annum is collected at harvest time. To improve facilities for the marketing of the tenants' produce, the estate has opened its own co-operative sales commission shop. During the last four years this shop had a turnover of Rs. 8,54,000 and a profit of Rs. 4,100.

CHAPTER X

RURAL ENGINEERING

The Role of Engineering

It can truly be said that the achievements of modern science have contributed to man's control over nature mainly through developments in engineering, and it is not without reason that thinking men have talked of the need of science and art of social engineering which would enable us to plan and control social phenomena and institutions more or less as engineering gives us control over technique in the fields of production, transport, housing and a myriad other branches of individual and community life. For our purposes, we may divide engineering into mechanical, civil, sanitary and electrical, and examine

how far these branches of engineering are capable of transforming the rural environment. Mechanical engineering has brought about in the West improvements in tools, implements and machinery and laid the foundation of this Machine Age. It has played its part in elevating rural life to a new plane by providing new agricultural implements which have made large-scale farming possible as in U.S.A. and U.S.S.R. To civil engineering we owe our cities and towns, roads, canals, railways, land reclamations, etc. Elecrical engineering has been the foundation of what is sometimes called the New Industrial Revolution, comparable in its effects with the earlier revolution based on the substitution of steam for water-power or just the power of the human muscle. It received a great stimulus by the invention of hydro-electricity and recently of thermal electricity, on which is built up a diversified industrial structure in countries like France, Germany, Switzerland, Japan and Russia. And, sanitary engineering has been employed for the improvement of living conditions through extensive schemes of housing, water-supply and town-planning. It is not, of course, suggested that these four branches work separately. In most projects, they have to be combined and co-ordinated so as to give the best results. The point is that it is mainly through developments in these four branches that far-reaching changes in rural life and environment have been brought about in European and American countries, and the same results could be obtained here if we have a programme of rural engineering.

(A) Mechanical Engineering

As regards this branch, there is not much to say. The possibilities of any large-scale mechanisation of agriculture in this country are at best limited, at least so far as the immediate future is concerned. There is, however, immense scope for improved tools and implements which could be utilised by our farmers on their small holdings and under diverse local conditions of soil, rainfall, etc. The agriculturist as well as the village artisan needs cheap light and simple machinery, and developments in mechanical engineering which provide the same need specially to be fostered.

(B) Civil Engineering

It is obvious that in India civil engineering has developed more than any of the other branches mentioned above, and there is still immense scope for further development. The main direction in which progress has been achieved is irrigation. Road transport, canal transport and land reclamations and improvements have, on the other

hand, received scant attention. Let us start by reviewing the work done under irrigation.

1. Irrigation

The facts regarding the need for an assured and adequate water-supply for agriculture have been given in an earlier chapter. To re-capitulate them briefly, except in the Indo-Gangetic plain and the West Coast, deficiency of rainfall causes harm both to man and cattle and often results in famine. In parts like Sind, Rajputana and south-west Punjab which are practically rainless, cultivation is not possible without irrigation. The uplands of the Deccan are constantly exposed to draught. Further, crops like rice and sugarcane require large quantities of water at regular intervals, and this is available only in a few regions. In a word, the prosperity of Indian agriculture is ultimately bound up with the progress of irrigation.

Evolution of Government Policy

The attention of the Government to the need for irrigation works was drawn sharply by the various famines during the nineteenth century, but Government was reluctant up to the end of the century to face up to the question in all its seriousness, mainly out of considerations of cost. Their policy was to develop productive irrigation works and to neglect protective ones. It was in 1901 that the Irrigation Commission emphasised the protective value of irrigation works and pointed out that the indirect savings they may bring about by reducing the cost of famine relief, and by obviating the need for remissions of the land revenue, etc., would often make up for the expenditure on such works. More than this, however, the Commission argued that " the expenditure which the Government may legitimately incur on famine prevention cannot be limited by a consideration of the reduction in the future cost of famine to the State which will result from such expenditure " and that " a much higher scale of expenditure may be justfiied for the sake of saving the inhabitants of insecure tracts from all the losses and demoralization and miseries of famine."

As a result of the above recommendations, fresh Provincial surveys were made and a large number of new irrigation projects were undertaken. Till 1919, all the irrigation projects in India were controlled by the Government of India and were sanctioned with the approval of the Secretary of State. Under the Reforms of 1919, irrigation was classed as a Provincial subject. Since then, there has been greater activity in regard to irrigation and several projects have been

undertaken. The Sutlej-Valley works were sanctioned in 1921-22 and were completed in 1932-33 at a cost of Rs. 33.31 crores ; they irrigated in 1938-39 an area of 1,649,459 acres against an estimated area of 1,942,000 acres in British India ; the project is expected to irrigate a total area of 5 million acres in course of time. The Sukkur Barrage and canals in Sind were opened in 1932, the cost being Rs. 24 crores. In 1938-39, the canals irrigated an area of 4,015,407 acres, the total area expected to be irrigated being 5½ million acres. In Bombay, the Bhandadhara Dam and the Lloyd Dam at Bhatgar were completed in 1925 and 1926 respectively. In the U.P. the Sarda Canal was opened in 1928 and it now irrigates about 8½ lakhs acres. The Cauvery-Mettur project, started in 1925 and completed in 1934 at a cost of Rs. 737 lakhs, is estimated to serve an area of 1,300,000 acres. The scheme also includes supply of hydro-electric power for industrial purposes. In most cases, especially in the Punjab and Sind, entirely new areas have been brought under cultivation.

The Royal Commission on Agriculture recommended co-operation between the Irrigation and Agricultural Departments, the creation of local advisory committees, and the establishment of a central bureau of irrigation at Delhi. The last recommendation was given effect to with the establishment in 1931 of the Central Bureau of Irrigation as an adjunct to the Central Board of Revenue. Its functions include supply of information to provincial officers, co-ordination of research in irrigation and propagation of the results achieved.

The Russell Report suggested the establishment of a central irrigation station for all India for working out the agricultural problems. The station should serve as a centre for the study of the relations of soils, water, and growing crops, the interaction between salt water and soil, the reclamation of salted and alkaline land, the movements of subsoil water, and the agricultural effects of various sequences of crops. The same Report also suggests that there should be more complete co-ordination of the investigations on dry farming which should be linked up with the work of the proposed Irrigation Research Station.

Present Position

The present position may be summed up as follows : The net area irrigated in British India in 1939-40 was 55 million acres (against 43.2 million acres in 1927-28) of which 29 million acres were served by canals, 6 million by tanks, 13 million by wells and 7 million from other sources. The total capital outlay on irrigation and navigation

works was Rs. 152.80 crores in 1938-39 and the net revenue receipts were Rs. 9 crores yielding a return of 5.89 per cent. The above outlay included Rs. 38.79 crores spent on unproductive works yielding less than 1 per cent. return on capital.

The extent of irrigation facilities in different Provinces may be seen from the following table for 1939-40.*

Province.	Total area sown. Acres.	Area of crop irrigated. Acres.	Percentage of area irrigated to area sown.
Ajmer-Merwara	251,014	85,748	34·1
Assam	7,507,112	654,749	8·7
Bengal	30,228,400	2,073,002	6·8
Bihar	23,260,300	5,220,757	22·5
Bombay	29,413,873	1,407,705	5·0
C. P. and Berar	27,133,285	1,380,124	5·1
Coorg...	149,216	4,453	3·0
Delhi	247,638	90,745	36·3
Madras	36,280,212	10,655,537	29·3
N.W.F.P.	2,635,447	1,064,945	40·4
Orissa	7,005,958	1,507,242	21·5
Punjab	29,946,850	17,046,510	56·9
Sind	5,623,877	5,289,049	94·5
U. P.	45,161,675	13,153,590	29·2
Total ...	244,574,857	59,634,156	24·3

Irrigation facilities may be said to be in an advanced state in Sind, the Punjab and N.W.F.P. The U.P., Madras, Bihar and Orissa may be grouped together as having on an average a third of the area under irrigation. In Bombay and C.P. and Berar the percentage of area irrigated to net area sown is only 5 and 5.1 respectively. Assam and Bengal have also poor irrigational facilities, but these are provinces which receive good rainfall.

About a fourth of the irrigation in India is provided by wells of which there are nearly 25 lakhs, irrigating about 13½ million acres of land (including Indian States), the capital outlay being Rs. 100 crores. There is much scope in all parts of the country for the expansion of irrigation by wells. The Royal Commission on Agriculture recommended Government assistance for the development of tube-well irrigation through expert advice, provision of finance on *taccavi* system and supply of boring equipment and skilled labour on payment of a moderate charge.

Tanks, like wells, act as reservoirs which irrigate small areas roundabout. These are of great help to the rural population, especially during the break in the monsoon ; they further raise the level of the subsoil water and thereby reduce the cost of irrigation. Tanks are of great importance in Madras where there are 35,000 of them

* Compiled from "Statistical Abstract of British India, 1930-31 to 1939-40," pp. 551-2.

serving 2.5 to 3 million acres of land. Many of these are dilapidated and require repairs, especially in localities where canal irrigation is not possible.

Defects of Government Policy

The following table gives an idea of the relative importance attached by Government to productive and protective irrigation works (1939-40) :*

	Productive works.	Protective works.
Area irrigated ('000 acres)	25,251	3,042
Mileage in operation ('000)	58	15
Capital outlay (Rs. in lakhs)	1,15,28	34,51

It will be seen from the above table that the policy of the Government is to give preference to productive works (i.e., those that yield within ten years of their completion a net revenue sufficient to cover the annual charges on the capital investment). Protective works which are intended to ensure protection against famines in regions of precarious rainfall have not been sufficiently developed.

Governments have been spending large sums of money on famine relief. It is estimated, for example, that Bombay's average annual expenditure on famine relief for the 20 years ending 1915-16 was Rs. 35,50,000 ; with this amount probably many protective irrigation works could have been established. It may be noted that in the famine-stricken region of Bijapur this year, the Government have already spent or sanctioned more than a crore for famine relief and other land improvement works. In addition large sums are spent by private bodies on relief. Although four large rivers flow through the district, and a project of irrigation was prepared as early as 1907, nothing has as yet been done to implement the same. Considering the immense cost by way of relief operations and in terms of human misery the capital expenditure needed for the same can never be too high. In the Ceded Districts (Madras) famine relief was recently costing Rs. 1 lakh a day. In Hissar, Rohtak and Gurgaon districts of the Punjab in 1938-39 relief operations absorbed Rs. 27,99,676 and remissions in revenue were granted to the extent of Rs. 7,66,935. These are isolated instances but similar operations have been a recurring feature in most of the famine zones of India and the aggregate amount spent must be an enormous figure. If these facts are taken into consideration, the urgency of providing funds for protective

* "Statistical Abstract for British India, 1939-40," Table No. 192.

irrigation works will be readily appreciated. The Government cannot afford to allow economic and human losses of such magnitude to continue merely on the ground of difficulty of finding the initial large sums necessary. It may be added here that in the fixing of irrigation dues also a policy of moderation is the one that promises the best results in the long run, and it would be economically justifiable if the supply of water through irrigation is subsidised by means of specially low prices in the larger interests of agricultural improvement and prosperity. This aspect of the question has hitherto not received the attention it deserves.

Scope for Improvement

The possibilities of extension of irrigation in India are great and in order that agriculture may not be affected by the vagaries of the monsoon, every step should be taken for the extension of irrigation systems. Whether such activities are remunerative to Government or not should not be the main consideration. It is a question of providing water facilities for the maximum use of land and labour for successful production of crops. It is urgently necessary to give a more secure and better standard of living to the peasants who are handicapped by insecurity all along. Government should review the position in regard to outstanding irrigation projects and try to overcome engineering and financial difficulties, if any. A survey should be made of all the possibilities of diverting flood and surplus water to regions of deficient rainfall, where there is an urgent need of water for the irrigation of the *kharif* crop, and for storing in the soil for growing *rabi* crops. The Royal Commission on Agriculture mentioned several projects which may be started for the extension of irrigation, such as the Thal project in the Punjab, and the lower Sarda Canal project in the U.P. In Madras, there has been a long-standing proposal to impound the waters of the Tungabhadra river by the construction of a reservoir in the Bellary district. This would provide water for a wide extension of irrigation in Bellary and Anantpur districts, and would protect a large area which is threatened by acute famine almost every ten years. In the Coimbatore district of the same Province the Upper Bhawani Project, if started, can irrigate 110,000 acres of first crop and 60,000 acres of second crop. In Bombay Mr. Beale surveyed in 1907 the irrigation possibilities in the famine areas of the Province and recommended various projects for North Gujarat and for the famine districts of Bijapur, Sholapur and others. Part of the programme has been carried out but some important pro-

jects still remain to be undertaken. If Mr. Beale's recommendations of 1907 had been carried out the periodical occurrence of famine in Bijapur could have been avoided. The Western Ghats with their heavy rainfall can supply water for a hydro-electric station and irrigation projects. The Koyna scheme can be developed into a great project for chemical industries and can banish scarcity from the famine areas of the Deccan. There are several rivers in Gujarat whose waters could be utilised in the same way.

The Bombay Irrigation Inquiry Committee (1938), while recommending that the capital expenditure on irrigation projects should be increased from Rs. 10 lakhs per annum to Rs. 15 lakhs per annum, remarked that although their direct financial results may be disappointing, the irrigation works as a class are of substantial value to the rural population, and that if the Government are able to spend more money, and carry out extensions and developments at a faster rate, there is full justification for such a policy. Further they observed that "instead of discussing first principles and deploring past losses every time a new project has to be sanctioned, the general policy of Government in our opinion should be to sanction new works, if they can afford the outlay, without expecting a return in the shape of full interest charges in less than twenty years." These remarks would probably apply with equal force to other provinces also.

2. Rural Roads

The importance of good roads for rural areas hardly needs any emphasis. The present Viceroy has rightly emphasized the urgency of providing for rural communications on an extensive scale in the post-war period. The matter for consideration is the right type of road and the agency through which the programme of road construction is to be financed and carried out. The absence of such roads has all along been a serious handicap in the way of efficient and economical marketing of agricultural produce. The excessive preoccupation of the British administrators with the needs of foreign trade led them to concentrate on railways and on the requirements of larger towns and cities to the detriment of village roads. In the layout of the road system military considerations had a larger weight than those of rural development. With the advent of the motor bus a new vista of possibilities has been opened up and the time has come

for formulating a plan of road, river and canal transport so as to co-ordinate them into a complete transport system.

Present Position

There are at present four trunk roads with which subsidiary roads are linked : (i) from Khyber to Calcutta ; (ii) Calcutta to Madras ; (iii) Madras to Bombay and (iv) Bombay to Delhi. On the whole, trunk roads covered 5,000 miles out of a total metalled road length of 82,299 miles in 1936-37. As regards subsidiary roads, South India is best provided and parts of Rajputana, Sind, Punjab, Orissa and Bengal the worst. The absence of good subsidiary roads is attributed to sparseness of population in some regions, unbridgeable waterways and lack of suitable road materials. In addition to metalled subsidiary roads, there are *kachcha* roads, which covered 231,883 miles in 1936-37. On the whole there are road facilities of 314,181 miles in British India with its 461,115 villages (including 1,724 towns). In other words, there is a provision of 0.68 mile of road per village. Assuming that an average length of 8 miles of road is required for each village,* it will be seen that only 8.5 per cent. of the village road requirements are met at present. Many a village continues to be inaccessible to main roads. Even the existing roads, bad as they are, are allowed to deteriorate further owing to neglect, especially by the local bodies. Further, the growing motor traffic is wearing out the roads at a rapid rate and a new problem of road construction and maintenance is thereby created.

The figure of 0.68 of a mile given above is again an average and most of the roads link towns and not villages. A vast majority of villages have no roads at all. What are called village roads are mere water-courses, narrow, zig-zag, deep and cut up in places because of heavy cart traffic. These tracts are serviceable only during fair weather and are useless during the monsoon for want of bridges or properly built causeways. During floods, communications are held up for periods varying at a time from a few hours to some days. The condition of these roads in different seasons differs with the nature of the soil : roads in black soils become sticky and impassable during the rains ; those in the light *gorat* soils a little less so, but they become easily scoured and get deeper ; those in the sandy soils as of North Gujarat become impassable in hot summer months and people have to avoid using them at noontime ; *moram* soils of Kathiawar are the least troublesome, and village roads are not a problem there.

* *Cf.* S. S. Naik: "Rural Communications," Quarterly Journal of the Local Self-Government Institute, p. 585.

Recommendations of the Royal Commission

The Royal Commission on Agriculture also pointed out that in all provinces the roads are often mere tracks that can only be used during the dry weather, and that good communications are of great importance to the cultivator, for on them largely depends his opportunity for the favourable marketing of his produce. While admitting the necessity of good main roads, the Commission emphasised the importance of subsidiary communications which are of even greater concern to the cultivator. They said : " The provision of excellent main roads adequate in all respects for every form of transport is of little benefit to the cultivator, if his access to them is hampered by the condition of the road which connects his village with them. What matters most to him is the state of the road between his village and the main road and his market. . . . We should however consider it unfortunate, if the growing sense of the need for improving the main roads were to divert attention from the need for improving the subsidiary communications which are of even greater importance to the cultivator. We, therefore, hold that along with the policy of developing main roads should go that of developing communications between them and the villages which are not situated immediately on them."*

Type of Road Suitable for Villages

The village road should serve as a link between the village and the nearest market town or to the nearest public road of class I or class II for the purpose of transport of agricultural produce by the cultivator. The villagers carry their products to and bring their requirements from the market along such village roads. The vehicle required for transport is the bullock cart of country design. The bullocks are used for agricultural operations during the growing season and for draught in the off-season. The quantity carted by each cultivator is not much, and his produce can be discharged at the market in a few trips in the season. For this purpose, there is no need for a I or II class road or a motor vehicle for transport. One has to remember that for the small cultivator carting is a subsidiary occupation and in the zeal for road making care should be taken that he is not deprived of this source of income unless there is a distinct compensating gain from higher values for his products. Already complaints are heard that motor traffic has deprived these men of their small source of income with the result that some of them are unable to maintain a pair of bullocks for the whole year. They are therefore

* *Op. cit.*, p. 378.

Agriculture expressed the view that road development may be expedited by raising loans for financing the same. It was further stated that in view of the quasi-permanent nature of the roads, the annual amount required for amortisation of these loans should not be a heavy charge on the Provincial Governments' resources. As regards the maintenance of village roads, the Commission rightly observed that "any improvement in the condition of village roads must depend largely, if not entirely, on the efforts of the villagers themselves." The proper course would be to induce the villagers, through the *panchayat,* to supply the labour necessary for this purpose more or less at a nominal wage as a matter of social duty.

To sum up, village roads are essential for the economic improvement of the agriculturist. It would be sufficient if *kachcha* roads are provided linking the village to a primary market or to Class I or II road. As regards finance, the revenue gathered for road development and by way of petrol duty should be utilised, and there should be definite and substantial allotments for rural roads. The work of annual repairs to these village roads may be entrusted to the villagers themselves through a system of corporate labour.

3. Sanitary Engineering

(*a*) *Housing Problems in Villages*

Let us now turn to problems of sanitary engineering with reference to the needs of the village. Usually, when one mentions the housing problem, one thinks only of urban housing, and housing especially for industrial labour. But it would hardly come as a surprise to people who know village life that housing in the villages is also a serious problem, as the conditions prevalent to-day are a great source of danger to the health, efficiency and even morality of the people. The houses in the villages to-day may be divided according to their quality, into three categories. First come those which are well-built, fairly well-ventilated and with efficient accommodation for men as well as cattle. They are generally built of brick-masonry. They are owned by brahmins, banias, landlords, village-officers and such other members of the higher sections of the village community. Such well-constructed houses may be, at the most, 10 per cent. of the total houses in the village. But even in these relatively commodious houses, occasionally cattle may be found sharing the same room with human beings, not for want of space, but because of a peculiar belief that the cattle need attention of the housewife at night. Next come houses which are of mud-masonry and have thatched or tiled roofs. These are ill-lighted and ill-ventilated. The whole family and

even the cattle live in the same room except during the hot season. These houses are highly insanitary and unhygienic for human habitation. Any attempt to open windows in them is resented and such windows as there must be under the law, if any enacted, are soon covered up or plastered. The inmates have no vitality to resist climatic changes ; nor have they separate space either in the courtyard or a separate shed, where cattle may be stabled. Usually, the kitchens are in the living room and in the absence of chimneys all the smoke hangs on in the living apartment for a considerable time. The third class of houses are mostly those of the labourers and the village menials. They are small and flimsy structures of mud, dark and infested with flies and mosquitoes. With the insanitary habits of the inmates these dwellings are more like village slums. On the whole, there may be a few houses in our villages here and there which may be considered well kept. But, viewed from modern standards of sanitation and hygiene the majority of them are certainly unfit for human habitation. Usually, these houses are huddled together, with very narrow lanes in between. The manure pits and the refuse dumps are very near the dwelling houses and in many cases the uneven ground roundabout where filthy water accumulates is a perpetual source of malaria and other diseases like kala-azar and hookworm.

Lest the people's susceptibilities should be touched, not much work is done by Government agencies to improve housing conditions. The only work done is confined to the opening of windows by the sanitary staff. There may, however, be a few exceptions, such as in Gurgaon where excellent work has been done in this direction under the inspiration of Col. Brayne. The Bengal Land Revenue Commission reported that of all the four Provinces, Bengal, the Punjab, Madras and the U.P., visited by them, Bengal was the worst in respect of housing conditions. On the other hand, Gurgaon (Punjab) was the best. This proves our oft-repeated thesis that where sympathetic efforts are made and proper facilities are provided, people are not averse to improvements. The main handicaps are low vitality of the people, and a decadent social system.

It would be difficult to alter the housing conditions all at once. It would require education and propaganda for a long time. The Gurgaon work was mostly due to the sympathetic efforts of Mrs. Brayne, the Deputy Commissioner's wife. This indicates an entirely new line of approach to this problem. To ensure successful and lasting

results the problem needs to be tackled from more than one side. Education of the right type would have to be given to the villagers so that they may know the value of clean surroundings and sanitary living. Possibly, in order to avoid congestion, house-planning together with strict enforcement of general rules of sanitation through the *panchayats* would be necessary. Under Indian conditions, the approach to this whole problem would be easier if services of female workers are enlisted for propaganda and instruction as they can influence the women folk concerned more effectively. Better houses cost money and so ultimately the housing problem gets linked up with the problem of raising rural incomes. In the meanwhile, it would be necessary to enlist the active co-operation of the village *panchayats* so as to make the best use of local initiative and interest. At the same time, Government must assist in the task of relieving congestion and extending the village area. In several cases it is difficult to acquire land for the extension of village sites ; it takes years to decide conflicting claims and resolve objections from people to the acquisition of their lands. There should be an expeditious procedure for this question. Along with this, the village people, particularly the farmers, should be granted special facilities, (i) to enable them to live on the fields wherever possible, (ii) for the creation of new hamlets in the " seem " area and (iii) to provide land for cattle sheds (*vadas*) adjoining or near their houses where possible.* Rural Co-operative Housing Societies financed and otherwise helped by the Government should also be started.

We have not so far paid much attention to village planning in India. In some cases, there is a penalty imposed on farmers building pucca houses in their fields. This anomaly should be removed by granting a concession in land revenue for a certain number of years for the area occupied by such houses. The advantages of such a move are obvious from every point of view. It would be an incentive to a consolidation of holdings. Special loans should also be granted free of interest to construct sanitary farm-houses on approved models in village areas also.

In this connection, it is necessary to emphasize that our engineers should specialise in the construction of rural houses with mud masonry,

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* In a village near Baroda which Sir Manilal Nanavati had taken under his care for reconstruction purposes, there was an old rampart—a ditch 30ft. x 15 ft. surrounding the villages as a protection against dacoits constructed 75 to 100 years back. It was very unhealthy in every way and overgrown with shrubs. The people were allowed to take over land adjoining their houses provided they reclaimed the area. This was done in a fortnight. Thus a longstanding nuisance was soon removed with the co-operation of the people and the area so reclaimed provided open spaces at the back of their houses.

bamboo and other cheap materials locally available. Several designs should be prepared for different climatic conditions and environments and made available to the *panchayats* for guidance. We have a number of qualified engineers in our cities, but it does not appear that they have so far seriously considered the problem of rural engineering. This is a commentary as much on our educational system as also on the attitude of Government to problems of welfare in village areas.

(b) *Village Water-supply*

Another subject of equal, if not greater, importance to village life is supply of clean drinking water. In the absence of this facility, people suffer from many diseases and fall a prey to epidemics like cholera. There are any number of villages that have no adequate water-supply. In some places the water is contaminated as the same water source is used for drinking purposes as well as for washing, including the washing of animals. In some cases, the natural supply is short ; in others, there is lack of proper care. Adequate arrangements for all the water-supply needed for various purposes should be a primary responsibility of the local body in charge, and proper supervision in this respect by officials is an obvious corollary of the same.

4. Land Utilisation Survey

Before we close this section on civil engineering, we may point out the need for a land utilisation survey, which all these engineering schemes pre-suppose. Land utilisation is, however, a term used primarily in connection with agricultural land, so that it often means merely soil surveys. The test for land utilisation, in the words of J. L. Buck,* " is the satisfaction which the farm population perceives from the type of agriculture developed, the provision for future production and the contribution to national needs." Proper land utilisation in this sense involves an examination of the natural factors affecting both the present and potential productivity of the land. These factors are the general configuration of land, temperature, rainfall and soil, which together constitute the physical background of agriculture and determine the limits of cultivability and productivity of land. Soil fertility is a complex phenomenon and cannot be explained merely in terms of the physical and chemical properties of the soil. It also depends on factors such as aeration, structure, texture, age and methods of management of the soil. The type of soil is an im-

* "Land Utilisation in China," p. 1.

portant factor determining the suitability or otherwise of growing a certain group of crops. Steady maintenance of the productive power of the soil is another important aspect in land utilisation. Since, however, one use of land excludes another, it is necessary to assess fully the potentialities of all types of land in respect of all possible uses, and the problem thus gets linked up with engineering in the broad sense.

Progressive countries like the U.S.A. and the U.S.S.R. have completed extensive soil surveys and mapped out all types of soil profiles. In the U.S.A. State Planning Boards have been started as a result of land utilisation surveys conceived on a broader basis. China has also completed a land utilisation survey. Even in England, which is not primarily an agricultural country, land utilisation survey has been functioning for the last ten years. In India, however, a comprehensive scientific survey of land has not been taken in hand and it has not received the blessings of the Royal Commission on Agriculture. But the population of the country has been increasing rapidly, and if the people have to depend on the available resources of the country, land utilisation surveys with a view to the best possible utilisation of land are essential. Such surveys would throw valuable light on the possibilities of utilising the vast tracts of hitherto uncultivated land and would also indicate the scope for preventing soil erosion and maintaining the productivity of lands under cultivation. Problems of water-logging, land reclamation, drainage, irrigation and engineering can be tackled rightly only when we have the necessary detailed data which a complete land utilisation survey alone can furnish.

The Tennessee Valley Project

As an illustration of the way in which a land utilisation survey can become the basis of a policy of developing particular regions we may mention the Tennessee Valley Project in the U.S.A. Under this project, at the Headquarters, the T.V.A. (Tennessee Valley Authority) has a comprehensive plan for the huge region in its charge. This plan has been worked out on well-thought-out scientific lines and takes in agriculture, the conservation of soil, of water-power, of mineral wealth, of game, and of forests ; health, diet, housing (standards of which were in general very low in the region) ; education, development of farming and of rural industries by means of cheap power and other amenities of life.

The working out of the plan has also important lessons for this country. Wherever possible, the T.V.A. works through existing orga-

nisations. Its area comprises parts of several separate States, and it is well-known how jealous the States are of their rights ; within each State there are cities, with their own administrations and all the machinery of local government. To make the matter as simple as possible, the T.V.A. operates by getting the local authorities to work for it ; but it gives advice combined with grants. Advice and grants together secure that the broad lines of the plan are being realised, and, what is more, the active co-operation and enthusiasm of the local people are enlisted. Modifications of the scheme to suit local needs are accepted by the Authority, if they fit in with the general plan. In any case, the execution of the scheme is left largely to local authorities, who thus have the satisfaction of being active partners in a big creative enterprise.

Another important point about the T.V.A. is its regional character. It operates in a region big enough to make large-scale planning worthwhile in matters like flood control or the provision of electric power, but not too big to include fundamentally different problems of life and interests. The Tennessee Valley is, from the standpoint of human biology, a natural region, and of the right size for planning.

The following is an account of the achievements of the T.V.A. during the past decade, 1933 to 1942 :

" The transformation that is being wrought by the project is all the more striking if one takes into account the conditions of this region prior to the inauguration of the scheme. This region was considered to be an important source of raw materials for the manufacturing areas of the U.S.A., especially in regard to tobacco and cotton. Owing to the adoption of flood control measures, the problem of erosion has been solved and improved farming practices are being resorted to in this region. Dairy herds browse on grassy slopes where, only a few years ago, not even a wild-mountain hog could have survived. Farmers who had never kept a chicken until a few years ago have built up a poultry industry of very great magnitude. From a one-crop " fibre economy " much of the cotton area is being converted into a balanced agrarian economy. Apart from its agrarian prosperity, the military importance of this region has become considerable. It is significant that two-thirds of the electric energy now generated in the Tennessee Valley's 13 hydro-electric and six steam plants is going directly into war industry.

"This project is, paramountly at present, a colossal engineering corporation, entrusted with a construction task enormously speeded up by the war. It is also a power generating and transmitting corporation, ranking with the largest of such utilities in the U.S.A. It is also a distinctive regional planning agency, integrating its actual physical programmes into the work of local agencies, both Governmental and private. It is a research body too, developing new industrial processes, new architectural designs, new farm machinery, new methods of malaria control, for the benefit of the people of the entire U.S.A."*

India needs as a first measure a land utilisation survey which would be comprehensive enough to take into consideration problems of soils and reclamation, development of irrigation, and water-supply both for crops and men. On the basis of such a survey, it would be possible to adopt crop-planning with reference to the potentialities of each region and also to undertake, as conditions permit, engineering projects which would supply the varied needs of agriculture and rural life. It would not, indeed, be possible to adopt any such major plans for areas already intensively used ; there would be a number of difficulties in the way, especially because of the small size of holdings and the density of the rural population. But, with reference to undeveloped regions, the scope for reconstruction work based on a land utilisation survey would be immense.

(C) Electrical Engineering

That electricity has had a great civilising influence on life needs hardly to be stressed. It is a source not only of light but also of power. It can be used for domestic as well as industrial purposes. As a motive power for agricultural operations and for village industries, it can raise efficiency, increase earnings and thus improve the standard of living in the rural areas. It has been the settled policy of most Governments in the world to make electricity as cheap as possible and to extend its uses. In order to reduce the cost of generating electricity they have eliminated small uneconomic installations and introduced big power stations linked up in a grid so that wide areas can be reached and power supplied at a low cost. Taking the examples of countries with small farms, 95 per cent. of farm families in France, 90 per cent. in Japan and Germany, 85 per cent. in Denmark and 100 per cent. in Holland have been provided with central electric power station services.

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* *Commerce*, March 13, 1943.

Present Position

In India we have hardly already made any progress at all. The U.P. grid system supplied light to several villages, which is also used to run small flour mills and similar small plants. In the Mysore State there is a planned effort in this direction and power is supplied for lift irrigation from wells. To a still smaller extent power is supplied to villages in Madras and in the Punjab. In Baroda power is available to cultivators roundabout the city of Baroda and more than 100 installations are in operation for irrigation from wells. Thus in India, on the whole, electrically operated services are confined to large cities and towns. No efforts seem to have been made to extend their uses to the surrounding rural areas.

This unsatisfactory position is primarily due to lack of interest on the part of Government in developing electric power in this country. The Hon'ble Dr. Ambedkar, in his Presidential Address to the Policy Committee of the Reconstruction Committee No. 3. C, pointed out that the treatment of electricity as a matter of public concern had passed through many vicissitudes. " The Government of India seem to have become aware of it for the first time in 1905 when a circular letter was issued by it to the Provincial Governments. Thereafter, both the Provincial Governments and the Central Government seem to have gone to bed. They woke up when the urgency of active interest in electricity was emphasised by the Report of the Indian Industrial Commission published in 1918 and the Report of the Indian Munitions Board which came out a year later."* Even thereafter, no efforts were made to develop the powers resources and a hydrographic survey that was undertaken in 1919 on the recommendation of the Industrial Commission was wound-up in 1923 as it was found that the Act of 1919 did not permit the Central Government to spend its revenues on matters outside its field of administration. This is another illustration of the way in which the Reforms of 1919 have worked to the disadvantage of Indian industrial and agricultural development, and it is now necessary that the Central Government once again assume responsibility in this vital matter and chalk out a programme of power development.

The Grid System

It is true that the general poverty of the villages makes any scheme of electrification of the country-side on a Western scale difficult in India. But this fact should not lead us to the other extreme

* From *Indian Information*, November 15, 1943.

of ruling out of all possibilities of extending the use of electricity to the villages. Electricity can be utilised by the villagers both for agricultural operations and for rural crafts. There is also reason to think that if facilities are given to power concerns to extend their operations, electricity could be generated on a larger scale and supplied at a lower cost. According to the Munitions Board (1917), electrical transmission can be effectively extended upto 250 miles. The Royal Commission on Agriculture, though not optimistic about the development of electric power for agricultural machinery, admitted that the possibility of utilising electricity for the purpose of raising water from wells may make its use profitable in India even otherwise than as a mere surplus of power required for urban and industrial purposes (p. 363). Already, the cultivators in Gujarat, for instance, have installed hundreds of oil engines and pumps on wells for irrigation, and it would add to the efficiency of their operations if these were worked with electric power. An extensive use of electricity over a large area would make it possible to supply power at a low cost. This development is necessary as electric pumps are easier to operate than the oil engines ; they give better service, depreciate less and prove more economical in the long run. New areas can be easily opened. The same power could be worked for lifting water for drinking purposes in villages and towns where sub-soil waters are deep and their drawing difficult. There are at present about 15 such installations in the black soil region of the Baroda State worked by oil engines. These could be extended to other villages and electric power would help them better as the same generating station could help small industries besides.

In this connection a plan that has been adopted in the Baroda State deserves attention. The Government of Baroda have permitted the power companies to extend electricity to rural areas and are prepared to finance them with a loan without interest to be returned in ten years by instalments if power is given for irrigation. The estimated cost of running a transmission line is Rs. 2,000 per mile. The State has standardised electric motors and pumps which are leased out to villages on a rental or sold on an instalment system. The charges for power are fixed almost at the level of the generating cost. Unfortunately their larger scheme of a grid system could not be brought into operation owing to war conditions and the smaller stations could not work satisfactorily. Therefore the scheme has been kept in abeyance. In dry areas where flow irrigation schemes

are not possible one of the methods of extending this facility is by means of supplying cheap power for lift irrigation from wells, ordinary or tube. Under the existing system power cost except under a grid would be rather high, if not prohibitive, but the State can make it cheaper to the cultivator by giving subsidies to power companies. A little loss here would be more than compensated by the larger production of crops and their increased yields. It would be wrong to hold that the villager does not understand the advantages of electricity. There is noticeable a keen desire on the part of the people in the Charotar areas of Gujarat, for example (even in small villages of 2,000 or so) to have electric current both for light and power though that may not be equally true of other parts of the country.

Hydro-electricity vs. *Thermal Electricity*

India's greatest need is to have cheap electricity both for agriculture and for industry. Under modern conditions, one need not have hydro-electrics. Powerful thermal stations provide power almost at the same rates as the hydros. The idea of having large hydro-electric projects only for the generation of electricity is being given up. Hydros cost almost four times as much as thermal sets in capital expenditure, the normal figures being Rs. 800 and Rs. 200 per kwt. respectively. Again, hydro projects take two or three years to mature and even then there must be industries ready at hand to make use of the power generated at least to the extent of 30 to 40 per cent., while in the case of thermal stations, generation of power can be increased as the scope for consumption increases. Hydro sets are beneficial only when uses of the tail water can be found for irrigation, for which there is not always an unlimited field for expansion. The Government should encourage the installation of thermal stations at suitable places and cover the surrounding areas with a net work of small stepping stations. As a preliminary step it is desirable to encourage people to take up licences for the supply of electricity in smaller areas even though they may have to put up small but costly installations. But later when the grid system comes into operation these sets may be replaced by bulk supply from the grid. These small units would open up areas quickly. At least that has been the experience in Baroda, where there were applications for licences even from small rural areas all over the State. That is the only way to take industries to the rural areas and avoid concentration in a few towns, as has happened so far. In India industries require dispersion, more

so because cheap labour would be available locally or from nearby villages. It is only thus that we could supplement the meagre income from cultivation, cattle breeding or casual labour. This is one of the best methods of finding employment for the large number of unemployed and under-employed. For industries the initial cost of setting up steam or oil plants for the generation of power could be avoided. Electricity has many uses in the domestic life of the people especially in running small dairy stations or a set of power looms or small machines like those for hosiery. Japan has made the fullest use of these facilities by installing small factories in rural areas. That the people in India too would readily take to the use of electric power can be seen from the fact that in Surat alone more than 5,000 looms, mostly owned by artisans, are operated by electricity.

The Example of U.S.A.

In this connection it is interesting to note what the United States Federal Government have done to popularise the use of electricity on farms. Seeing that only 10 per cent. of the farms were served by electricity, the Federal Government's Rural Electrification Administration started studying the question and evolved a scheme by which power companies were to be financed to extend their operations to rural areas. Without such assistance from the Government, the companies were unwilling to extend their operations from a concentrated area of supply to unconnected and diffused receiving points. Under the Rural Electrification Act of 1936, self-liquidating loans for a period not exceeding 25 years could be granted to persons or institutions for the purpose of construction and operation of generating plants, transmission lines and distribution lines, for the supply of electric energy to persons in rural areas not receiving central station services. The Act also provides that loans may be granted for the building of required premises and the acquisition and installation of electrical and plumbing appliances and equipment. All loans bear interest, the rate for any year being the average rate of interest paid by the Federal Government on its obligations not maturing for 10 or more years and issued in the preceding year. The rate of interest thus charged comes to about 2.75 per cent. The Reconstruction Finance Corporation has been authorised to make advances from 40 to 100 million dollars a year. The Rural Electrical Administration has now been made a permanent body. The number of farms served by electricity has risen from 10 to 25 per cent. of the total.

An Electrical Commission

India needs an Electrical Commission to be appointed immediately as part of the post-war reconstruction programme. The Bihar Ministry had prepared a comprehensive plan for their Province before their retirement. The Bombay Government are working out a grid system for the whole of the Presidency. These may be more energetically pursued. But, above all, it is only through an All-India Electrical Commission that a scheme for the whole country can be drawn up. Cheap electric power is among the first needs of the country and it must have precedence over all other schemes of post-war development. If progress is to be achieved towards the elimination of want and the guarantee of economic security, the Government must set about evolving a plan for the electrification of the countryside by suitable stages as recommended above.

CHAPTER XI

AGRICULTURAL FINANCE AND THE CO-OPERATIVE MOVEMENT

THE problem of rural finance and of indebtedness lies at the root of our rural problem, as one can readily see. At present, the main agency providing the necessary funds to the agriculturist is the sowcar. The evils associated with this system are well known, as several Government reports on co-operation as well as banking as also the investigations of individual scholars in the field have dealt with the same. Let us here attempt a review of the work done in the direction of improvement in this sphere through the agency of Government and through the co-operative movement. The problems of rural finance and of indebtedness go hand in hand and we shall, therefore, review here also the various steps taken through legislation to deal with rural indebtedness.

A GOVERNMENT FINANCE TO AGRICULTURE

Government assistance to the agriculturist has taken the form of *taccavi* loans. These loans are a very ancient form of State help to the ryots to enable them to tide over emergencies such as flood and famine. The British administrators decided to continue the existing system and with that view various regulations providing for the granting of *taccavi* advances were issued in 1793. Subsequently, the Government passed a number of Taccavi Acts, those in 1871, 1876 and 1879 deserving special mention.

No active help was, however, rendered to the agriculturist until after the passing of the Land Improvement Loans Act of 1883 and the Agriculturists' Loans Act of 1884 as recommended by the Famine Commission 1880. But the loans given under these two Acts have not been large in amount, so that they cannot be regarded as an integral part of the normal finance of agriculture.

The Land Improvement Loans Act and the Agriculturists' Loans Act

The Land Improvement Loans Act is intended to provide long-term loans for effecting permanent improvements in agriculture. The term " improvement " is taken to mean any work which adds to the letting value of the land and the Provincial Government is empowered by the Act to declare any work as improvement as it deems fit. The maximum period of repayment is fixed at 35 years but the Local Governments are empowered to fix the actual period so as not to exceed the above maximum limit. In practice, the loans have been restricted to 20 years. The rate of interest to be charged is fixed in relation to the rate at which public loans are floated at the time.

Long-term finance under this Act has been little availed of by the agriculturists generally . Its amount has been estimated at about 35 lakhs per year for the whole of India.

Under the Agriculturists' Loans Act, short-term loans are granted for current agricultural needs, such as the purchase of seed, cattle, manure, implements and any other purpose not specified in the Land Improvement Loans Act, but connected with agricultural objects. Though the operation of this Act is not intended to be confined to occasions of distress, it is in practice resorted to only on such occasions.

The rate of interest charged is as low as the cost of the service permits. Loans are to be repaid usually at the next main harvest or after two main harvests. Great strictness is observed in respect of recovery, and this, in fact, has been a matter of complaint. Again, the difficulties of recoveries are increasing, and it is even felt that the policy of distribution and collection of *taccavi* loans would need a radical revision.

Rules under the Acts

Both the Land Improvement Loans Act and the Agriculturists' Loans Act are of an enabling character, that is, they enable the Local Governments to advance loans from State funds and invest them with wide powers to frame rules governing the issue of such loans.

Since the passing of these Acts, the various Provincial Governments have framed different rules suited to their particular requirements setting out the conditions under which advances could be granted.

The most important point on which rules have been framed by the different provinces is as to the object and purpose for which *taccavi* loans are granted. It was suggested by the Bengal Banking Enquiry Committee that the redemption of old debts of the agriculturists should be one of the objects of *taccavi* advances since, without such redemption no permanent improvement of land was possible The United Provinces seem to have been the first to accept the suggestion. In 1934, the U. P. Government amended the Agriculturists' Loans Act 1884, in its application to the United Provinces with a view to including (i) the payment of existing debt, and (ii) the purchase of rights in agricultural land, among the objects for which *taccavi* loans could be given. A similar provision for relief in case of indebtedness was made in Madras by the amending Act of 1935.

Under both the Land Improvement Loans Act and the Agriculturists' Loans Act it was of course intended to give advances in cash. However, it was found in practice in certain provinces like the Punjab that *taccavi* advances in kind were more suitable as they were more useful to the agriculturists and there was less possibility of misuse of funds. A system of *taccavi* loans in kind was therefore sanctioned in 1933 as an experimental measure and in 1933-34 seeds by way of *taccavi* were distributed in some of the districts. The results were satisfactory, as the loans were more usefully employed and the fields were sown with seeds which were comparatively free from disease. The system of loans in kind was therefore continued.

It was found in the N.W.F.P. that the *taccavi* advances were not used for the purposes for which they were granted. A scheme was therefore introduced whereby all advances were given to the Agricultural Department which in turn arranged for the supply of seeds, ploughs, etc., to the agriculturists. The loans were distributed in small amounts and it is claimed that this restriction on loans ensured a wider benefit to the people.

According to a ruling by the Government of India, special loans could be granted to agriculturists under the two Acts for facilitating processes which are necessary to the marketing of crops. Taking advantage of this, rules have been amended in Assam permitting advances for purchases of small plants for *gur* making, oil pressing, cotton ginning, etc.

Financial Operations under the Acts

On an average about 95 lakhs of rupees are granted every year by the Indian Governments in the form of *taccavi* advances—Rs. 35 lakhs under the Land Improvement Act and Rs. 60 lakhs under the Agriculturists' Loans Act. The table below gives a consolidated account of the operations under both the Acts in all provinces during the year 1937-38.

It will be observed that Rs. 75.50 lakhs were advanced during the year 1937-38 under both the Acts together. Though separate figures of advances under the two Acts are available in the case of eight provinces only, it is possible to state with reasonable certainty that out of the Rs. 75.50 lakhs mentioned above, less than Rs. 10 lakhs were advanced under the Land Improvement Loans Act. The sum, of course, is negligible. It is stated that the Punjab and C.P. are the only provinces which advance a little more than a lakh of rupees under the Act. In other provinces the advances are limited to a few thousand rupees.

Advances under the Agriculturists' Loans Act are higher, being Rs. 51.09 lakhs in the eight provinces for which separate figures are available. The Punjab and U.P. stand prominent, their advances under the Act being Rs. 10.45 lakhs and Rs. 18.54 lakhs respectively. Collections under the Act have been generally good with the result that the amount of loans outstanding shows a decrease from Rs. 157.50 lakhs to Rs. 109.34 lakhs during the year.

TABLE

Transactions under the Land Improvement Loans Act and the Agriculturists' Loans Act during 1937-38.

(In lakhs of rupees)

	Outstanding at the commencement of the year.	Advanced during the year.	Collected during the year.	Remitted during the year.	Under suspension at the close of the year.	Balance outstanding at the end of the year.	Percentage of recovery during the year to the total outstanding at the commencement of the year.
Assam ...	7·64	·24	·31	5·19	1.02	1·59	4·06
Bengal ...	32·64	3·62	21·35	1·49	·68	9·26	65·41
Bihar ...	40·00	1·64	7·75	·01	·75	12·60	19·37
Orissa ...	1·98	1·15	·42	...	·87	·45	21·21
N. W. F. P. ...	13·37	2·07	1·09	·02	1·76	9·72	8·15
Punjab ...	52·17	12·24	11·59	1·73	·51	54·84	22·22
U. P. ...	35·02	19·42	22·41	·68	5·04	33·25	63·99
C. P. ...	60·93	7·69	11·08	1·18	5·97	58·1	18·16
Berar ...	6·81	8·29	4·46	·05	...	1·59	65·49
Sind ...	50·94	·03	3·98	2·77	5·28	48·86	7·81
Bombay ...	63·59	9·57	9·28	1·07	10·87	66·14	14·59
Madras ...	84·54	9·54	10·76	·05	1·58	83·26	12·73
Total ...	449·68	75·50	104·48	14·19	34·28	379·69	23·24

Reference has been made earlier to the Madras amendment permitting the granting of loans for the relief of old debts. . During the year 1937-38, Rs. 7.41 lakhs were advanced for the purpose, the total advances at the end of 1940-41 amounting to Rs. 22.30 lakhs. The chief cause of this success was the creation of a special agency to deal with the applications. The recoveries also have been very satisfactory, being 97.5 per cent. of the demand. It is obvious that the amendment has proved useful, is working satisfactorily and is worthy of imitation in other provinces. Loans under this Act in Madras are granted in those districts where land mortgage banks are not operating. In the U.P. there has been a similar amendment but unfortunately it is a dead letter.

Results of the Financial Operations

The *taccavi* advances are intended to help the agriculturists and their results can best be judged from the extent to which they really serve this purpose. From the point of view of the State, however, the criterion would be the returns on the loans advanced. The table below shows the financial results of the operations under the Acts in each province for the year 1937-38. It will be seen that on deducting remissions from the interest collected by Government, the yield on the loan outstanding came to 1.32 per cent. Excluding Assam, it varied from 0.95 per cent. for Bengal to 5.87 per cent. for Berar. Considering the purposes for which the loans are given, the financial results on the whole, appear to be fair.

TABLE

Financial Results of Loan Operations under the Land Improvement Loans Act and the Agriculturists' Loans Act for the year 1937-38.

(In lakhs of rupees)

Province.	Amount of interest collected.	Principal remitted.	Net receipts.	Percentage of net receipts to loan outstanding at the beginning of the year.
Assam	·1	4·97	—4·96	—64·92
Bengal	1·61	1·80	+ ·31	+ ·95
Bihar	1·27	·1	+1·26	+3·15
Orissa	·4	...	+ ·4	+2·13
N. W. F. P.	·10	·2	+ ·8	+ ·68
Punjab	2·27	1·50	+ ·77	+1·47
U. P.	2·35	·68	+1·67	+4·76
C. P.	1·72	1·13	+ ·59	+ ·96
Berar	·45	·05	+ ·40	+5·87
Sind	1·56	·12	+1·44	+3.71
Bombay	2·07	·42	+1·65	+3·01
Madras	3·21	·5	+3·16	+3·73
Total ...	16·11	10·18	+5·98	+1·32

Taccavi loans have never been popular. The figures furnished by the Famine Commission and by the Central Banking Enquiry Committee about the loans granted under these two Acts clearly prove that the amounts advanced have been insignificant, as compared to the total needs. These loans are granted for specific purposes only and therefore unless the cultivator is forced by circumstances he is reluctant to imperil his credit with the moneylender (by borrowing from the Government) from whom he can borrow for any purpose. The system of Government loans is halting and inelastic and the method of collection rigid and mechanical. The endless delays in the disposal of applications, the levy of illegal gratifications by subordinate officials and the general red-tape character of the revenue agency by which the loans are administered are further drawbacks of the system. Finally, the facilities available and especially the procedure to be followed are not widely known to the public. It is for all these reasons that as a general means of financing agricultural improvements the system has been a failure, although during famine conditions and such other calamities, it has been of some help to cultivators of limited means.

B. Co-operation : Finance and other Activities

Development

The following statement shows the development of the co-operative movement in India including the Indian States.*

	No. of societies (in thousands).	No. of members (in lakhs).	Working capital (in Rs. crores).
Average for 5 years :—			
From 1910-11 to 1914-15	12	5·5	5·48
„ 1915-16 to 1919-20	28	11·3	15·18
„ 1920-21 to 1924-25	58	21·5	36·36
„ 1925-26 to 1929-30	94	36·9	74·89
„ 1930-31 to 1934-35	106	43·2	94·61
1937-38	111	48·5	103·02
1938-39	122	53·7	106·56
1939-40	137	60·8	107·10
1940-41	142	64·0	109·32

Of the total number of societies in 1940-41, 124 thousand were agricultural (including cattle insurance societies, and land mortgage banks and societies) and the rest were non-agricultural. The average number of societies per 10,000 inhabitants came to 4.2 and the working capital amounted to Rs. 3-4 per head. Members of the primary societies formed 2 per cent. of the total population.

* "Statistical Statements relating to the Co-operative Movement in India," 1940-41.

The operations of the societies formed under the Act of 1904 were restricted only to credit. The scope of the movement was widened with the passing of the Co-operative Societies Act in 1912, which permitted organisation of non-credit societies as well as of central banks and provincial banks. The publication of the Report of the Maclagan Committee on Co-operation in 1915 containing far-reaching proposals for the further development of the movement, the transfer under the Government of India Act, 1919, of co-operation to the control of Provincial Governments in the transferred departments and the rapid expansion of the movement till 1929 marked the further stages in the development of the co-operative movement. (With the onset of depression since 1929, the movement, however, received a serious setback.) Due to the fall in prices of crops, the burden of debt became accentuated and the dues of co-operative societies became frozen. This also affected the working of financing agencies adversely. The popular Ministries that came into power in 1937 were not slow to realise the magnitude of the problem. Co-operative inquiries were conducted in several provinces and States and proposals for rehabilitating the movement were formulated. In some provinces, such as the C.P. and Berar and Bihar, the debts of the members of societies were scaled down on the basis of their paying capacity and repayment spread over a number of years. Government gave financial assistance to the provincial banks in order to enable them to carry out these schemes. Other measures such as the passing of debt legislation, establishment of conciliation boards, etc., were adopted in order to alleviate the burden of debt of the farmers. After the outbreak of the war in 1939, the prices of agricultural produce marked a substantial rise with the result that the value of land as well as the income from land went up. In those provinces where the co-operative movement was in a comparatively healthier condition and where measures for the rehabilitation of the movement were well in progress even before the outbreak of war, a slight improvement is noticeable. (The overdues in agricultural societies in India came down from Rs. 11.15 crores in 1938-39 to Rs. 10.01 crores in 1941-42. Agricultural societies in Madras, Bombay, Mysore, Baroda, Travancore and Cochin account for the fall in overdues to the extent of Rs. 75 lakhs during the period. Overdues in the case of land mortgage banks too decreased from Rs. 11.60 lakhs in 1938-39 to Rs. 9.60 lakhs in 1941-42, even though their outstandings increased from Rs. 2.74 crores to Rs. 3.74 crores during the period. During 1942-43, some more improvement appears

to have taken place in the recoveries, for which, however, no statistics are available.

I. Agricultural Credit Societies

The primary societies, credit and non-credit, agricultural and non-agricultural, form the base of the structure of the co-operative movement. The agricultural societies far outnumber the non-agricultural societies as can be expected from the predominantly agricultural character of the country. Among agricultural societies, credit societies out-number non-credit societies. Thus, at the end of 1940-41, there were in all 123,723 agricultural societies, of which 104,084 or 84 per cent. were credit societies. The total number of members of all agricultural societies was 43 lakhs and their aggregate working capital Rs. 30.5 crores. Of this, the share capital amounted to Rs. 4.15 crores ~~and Rs. 1.20 crores~~ and the reserve fund and other funds to Rs. 7.27 crores and Rs. 1.23 crores respectively. The members' and non-members' deposits amounted to Rs. 1.22 crores and Rs. 1.15 crores respectively, while loans from provincial and central banks amounted to Rs. 15.31 crores. The owned funds as represented by share capital, reserve fund and other funds came to about 42 per cent. of the working capital (share capital 14 per cent., reserve fund 24 per cent. and other funds 4 per cent.). The members' deposits were 4 per cent. and the non-members' deposits formed approximately the same percentage. Loans from the provincial and central banks formed about 50 per cent. of the working capital. On a superficial view, the figures may not indicate an unsatisfactory position. However, on closer examination, it will be found that reserve funds in most of the cases are illusory, in the sense that they have been created without making any provision for bad debts or writing off bad debts from time to time. Even share capital in many cases represents deductions from loans. Obviously, the movement has failed to inspire confidence among non-members so as to attract their deposits. A more fundamental defect noticed is that the element of thrift in the movement is small compared with that in many European countries and that societies rely too much for their finance on their financing agencies. The societies had loans of Rs. 22.50 crores outstanding at the end of 1940-41, of which loans amounting to Rs. 10.40 crores or 46 per cent. were in arrears. The position in some provinces would appear to be much worse, apart from the fact that the system of calculating overdues varies from province to pro-

vince and that the above figures do not include overdue interest which, as judged from the present position of the movement, must amount to a large sum, though the accurate figures for it are not available. However, due to the recent war-time rise in prices of agricultural produce and of lands, distinct signs of improvement are noticeable in several provinces and States, particularly in Madras, Bombay, Mysore, Baroda and Cochin. The position in respect of overdues appears to have improved in the Punjab, N.W.F.P., and Delhi also as can be judged from the larger repayments of loans, though the actual figures of overdues show an increase in these provinces due mainly to a change in the method of calculation of overdues. The unsatisfactory position becomes further evident from the fact that out of the total loans of Rs. 22.50 crores due from members, fresh advances during 1940-41 amounted to Rs. 7.52 crores or 33 per cent. only. Further, we have also to take into amount the fact that in several cases fresh finance was the result merely of renewal of old loans.

A general idea of the present unsatisfactory state of societies is afforded by a reference to Statements I and II below—one giving the audit classification of societies* and the other showing their number and working capital at the end of 1940-41. It appears from these

TABLE I

Audit Classification of Primary Societies for the year 1940-41

	A.	B.	C.	D.	E.	Un-classed.	Total
Madras ...	351	1,774	8,601	1,651	...	...	12,377
	2·81	14·4	69·5	13·3	...	...	100
	(3·9)	(15·4)	(69·5)	(11·2)	...	...	(100)
Bombay ...	267	974	970	1,559	...	24	3,794
	7·0	25·6	25·6	41·1	...	0·7	100
	(5·5)	(25·2)	(25·8)	(42·1)	...	(1·4)	(100)
Sind ...	26	196	374	800	...	484	1,880
	2·0	14·7	28·1	22·6	...	32·6	100
	(1·7)	(28·8)	(29·3)	(10·7)	...	(29·5)	(100)
Bengal ...	28	306	15,867	3,931	3,947	11,187	35,261
	0·06	0·9	45·0	11·14	11·2	31·7	100
	(0·1)	(1·3)	(46·8)	(12·9)	(12·5)	(26·4)	(100)
Bihar ...	19	144	1,204	387	79	...	1,833
	1·04	7·86	65·67	21·12	4·31	...	100
	(0·9)	(6·4)	(66·4)	(21·4)	(4·9)	...	(100)

The number of unclassed societies is excluded.
Figures for Bhopal, Indore and Jodhpur are not available.
Figures in brackets indicate percentages, 1939-40.

* It may be mentioned here that the classification of the societies is not on a uniform basis. Each province has its own method. In some, special importance is paid to recoveries which can be easily manipulated by fictitious entries, leaving out the other important factors, such as thrift and the productive use of loans. It is necessary that measures should be adopted to have a uniform system of classification which would cover all important elements of the co-operative method and assign due weight to each.

	A.	B.	C.	D.	E.	Un-classed.	Total
Orissa ...	6 0·2 (0·4)	68 2·5 (2·8)	1,484 54·6 (51·9)	797 29·3 (30·6)	324 11·9 (12·8)	40 1·5 (1·5)	2,719 100 (100)
U. Provinces	2 0·03 (0·1)	128 1·7 (1·5)	3,729 50·5 (45·1)	2,403 32·6 (37·1)	1,118 15·1 (15·9)	... ...	7,380 99·98 (99·7)
Punjab ...	478 2·6 (2·2)	2,817 15·1 (14·2)	(i) (ii) 5,475 5,303 29·5 28·5 (30·1) (31·7)	4,008 21·6 (18·6)	... ...	502 2·7 (3·2)	18,583 100 (100)
C. P. and Berar ...	12 0·5 (0·3)	158 6·4 (5·2)	1,875 76·0 (70·7)	315 12·7 (18·2)	108 4·4 (5·6)	... ...	2,468 100 (100)
Assam ...	4 0·3 (0·6)	43 3·91 (5·7)	590 53·7 (52·1)	460 42·0 (41·5)	1 0·09 (0·1)	... ...	1,098 100 (100)
N. W. F. P. ...	6 0·8 (1·6)	40 5·2 (8·1)	(i) (ii) 262 357 33·7 46·0 (69·9)	43 5·5 (5.8)	... ...	68 8·8 (14·6)	776 100 (100)
Coorg ...	71 24·2 (15·7)	143 48·6 (43·6)	73 24·8 (30·7)	7 2·4 (8·9)	... ... (1·1)	... ...	294 100 (100)
Ajmer ...	9 1·7 (2·1)	147 27·3 (25·9)	247 45·9 (45·3)	106 19·7 (18·5)	... ...	29 5·4 (8·2)	538 100 (100)
Delhi ...	... ...	55 24·7 (19·2)	(i) (ii) 44 48 19·8 21·5 (14·8) (32·6)	63 28·2 (27·7)	... ...	13 5·8 (5·7)	223 100 (100)
Total (British India)	1,274 1·4 (2·5)	6,993 7·9 (14·5)	46,503 52·4 (50·9)	16,030 18·1 (21·8)	5,577 6·3 (3·8)	12,297 13·9 (6·5)	88,674 100 (100)
Mysore ...	189 9·7	887 45·3	754 38·5	126 6·5	... ...	... ...	1,956 100
Baroda ...	68 10·9	202 32·3	191 30·5	151 24·1	... ...	14 2·2	626 100
Hyderabad ...	90 2·4	471 12·7	2,365 63·6	568 15·3	224 6·0	... ...	3,718 100
Gwalior ...	13 0·3	181 4·7	754 19·5	1,798 46·4	380 9·8	747 19·3	3,873 100
Kashmir ...	45 1·7	469 15·3	2,068 66.9	460 16·1	... ...	... ...	3,042 100
Travancore ...	35 2·5	96 6·9	820 59·2	386 27·9	... ...	48 3·5	1,385 100
Cochin ...	26 8·2	70 21·9	98 30·7	93 29·2	32 10·0	... ...	319 100
Total (Indian States)	466 3·1	2,376 15·9	7,050 47·3	3,582 24·0	636 4·3	809 5·4	14,919 100
Total (All India)	1,740 1·7	9,369 9·1	55,553 51·7	19,612 18·9	6,213 5·9	13,106 12·7	103,593 100

figures that hardly 11 per cent. of the societies were in A and B classes. It is also seen that nearly 8 per cent. of the societies were under liquidation in British India and Indian States together, the percentage being more than 10 in respect of five provinces and three States. The position would appear still worse if one takes into account the fact that in several provinces a large number of societies are not taken into liquidation even after they have ceased to function for a number of years. An investigation by Sir Malcolm Darling showed that upto the end of 1934, 24 per cent. of the total number of societies

TABLE II.

The Number of Societies, the Amount of Working Capital of Working Societies and the Amount involved in Societies under Liquidation at the end of 1940-41.

	Number of Societies.	Number of Societies in Liquidation.	Percentage of (3) to (2)	Working Capital of Societies (Rs. in lakhs.)	Amount involved in Societies under Liquidation† (Rs. in lakhs.)	Percentage of (6) to (5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras	14,409	1,820	9·1	24,93	64·9	2·6
Bombay	5,298	845	15·9	16,95	68·8	3·7
Sind	1,829	196	14·7	3,00	14·2	4·7
Bengal	40,884	1,611	3·9	21,20	86·2	4·07
C. P. and Berar	4,939	1,356	27·4	5,05	60·2	11·9
Coorg	300	4	1·3	20	...	...
U. P.	16,850	940	5·6	3,31	8·36	2·5
Punjab	24,256	1,594	6·6	16,99	49· 6	2·9
N.W.F.P.	944	9	·9	25	...	...
Delhi	396	32	8·1	39	· 9	2·3
Bihar	8,287	852	10·3	4,49	21·03	4·7
Assam	1,535	291	18·9	79	...	...
Orissa	2,715	164	6·04	1,25	...	...
Ajmer	759	81	1·1	64	...	...
Total British India ...	122,401	9,295	7·6	96,31	369·19	3·8
Indore	...	...	...	...	...	...
Travancore	1,412	541	38·3	71	7·6	10·7
Gwalior	3,972	145	3·6	1,20	...	...
Cochin	314	66	21·0	51	...	...
Baroda	1,303	228	17·5	1,09	3·5	3·2
Mysore	1,956	178	9·1	2,72	...	...
Hyderabad*	4,251	131	3·08	2,90	4·1	1·4
Kashmir	3,815	147	3·8	97	2·1	2·16
Total States ...	17,023	1,436	8·4	5,67	17·3	3·05
Grand Total ...	139,424	10,731	7·7	10,198	386·49	3·8

started since the beginning of the movement had gone into liquidation. This percentage must have risen appreciably since.

II. Central Banks and Banking Unions

The central banks form an important link in the financial structure of the co-operative movement. They have been organised since the passing of the Co-operative Societies Act of 1912 to finance the primary societies and to act as their balancing centres. There are two types of central banks ; the first having a membership confined to societies known as banking unions and the second having a mixed membership of individuals as well as societies.

The area of operation of central banks varies widely from a taluka or tehsil in some provinces to a district in others. Central banks in Bombay and Madras and C.P. and Berar operate over com-

* Including Hyderabad Administered areas.
† Societies whose accounts have been closed are excluded.
N.B.—Figures for Coorg and the Punjab relate to 1938-39 ; those for Indore are not available.

paratively large areas, while in Bengal, Bihar, Orissa and the Punjab, their activities are confined to smaller areas. In Bombay and Madras central banks have branch offices in order to maintain close contact with the affiliated societies and to make available banking facilities in smaller towns. Central banks, particularly in Bombay and Madras, do other banking business such as accepting of deposits of various types—current, fixed, savings ; collecting bills, cheques, *hundies,* dividend warrants and railway receipts ; issuing drafts and *hundies,* safe custody of valuables, purchase and sale of securities and advancing loans at times to individuals against fixed deposits, Government paper, gold, silver and agricultural produce. Central banks in Bombay have developed large commercial business particularly of advancing loans against agricultural produce and to facilitate the development of this business several of them have introduced the system of nominal membership for their clients.

There were in British India and Indian States 601 central banks and banking unions with membership of 79,834 individuals and 121,292 societies at the end of the year 1940-41. Their working capital amounted to Rs. 2.67 crores (9 per cent.), reserve and other funds Rs. 4.37 crores (14 per cent.), deposits from societies and individuals Rs. 17.92 crores (60 per cent.), loans from provincial banks Rs. 4.50 crores (15 per cent.), and loans from Government Rs. 0.58 crores (2 per cent.). The borrowed funds amounted to Rs. 22.28 crores and formed 77 per cent. of the working capital. Loans outstanding at the end of the year from individuals amounted to Rs. 0.67 crores, while those from societies amounted to Rs. 18.31 crores. These figures show that almost 85 per cent. of the borrowed funds of the central banks have been given out in the form of loans. They also indicate that taken as a whole, the banks work on a very low scale of fluid resources. Though the figures of overdues in respect of principal or interest are not available, it would seem that they form a large percentage of loans outstanding. There is also a considerable proportion of bad debts. Detailed examination of the loans has been undertaken in Bombay and Madras in order to ascertain the position. In the course of examination where loans are not fully secured, more security is demanded, certain concessions are granted to the debtors such as reduction in the rate of interest or, in several cases, waiving of interest, and facilities for repayment of loans in instalments. Bad debts are to be written off from the owned funds (paid-up capital and reserves) of the societies. In C.P. and Berar and Bihar, rehabilitation

schemes have been brought into effect whereby examination in respect of every loan has been conducted, the debts from members have been scaled down according to their paying capacity and loans have been made repayable in instalments spread over a number of years not exceeding 20. The losses are first to be written off from the owned funds of the central banks and the creditors are to be paid *pro rata*. The Co-operative Societies' Act has been amended in Bihar and C.P. and Berar in order to facilitate compromise between central banks and their creditors. Arrangements have been brought about between several central banks and their creditors in these provinces and further work in that direction is in progress. The central banks in Bombay, Madras and the Punjab (and to some extent in the United Provinces) are in a healthier condition, while the condition of central banks in C.P. and Berar, Bihar, Orissa, Bengal and Assam is disquieting. Many of them had to close their doors on account of their inability to meet the claims of their creditors. As already stated, the working of central banks in C.P. and Berar and Bihar is being rehabilitated, while in Bengal, Orissa and Assam, no definite schemes have been put into operation as yet.

III. Provincial Co-operative Banks

(1) *General.*—The provincial co-operative banks occupy a very important position in the financial structure of the co-operative movement. The Maclagan Committee strongly recommended the organisation of provincial co-operative banks in each of the major provinces in order to co-ordinate and control the working of central banks, forecast and arrange for the provincial requirements as a whole and be the financial co-operative centre of the Province. Provincial co-operative banks have now been organised in all the provinces in India except the N.W.F. Province, Orissa and the United Provinces. The Punjab Provincial Co-operative Bank acts as an apex bank for the co-operative movement in the N.W.F. Province. The question of organising a provincial co-operative bank for Orissa has been held over for the duration of the war. There is a keen demand for a provincial co-operative bank for the United Provinces particularly with the recent development in the organisation of non-credit societies and the question is receiving the active consideration of the Government.

(2) *Membership.*—There is wide diversity with regard to membership in various banks. Individuals hold shares and exercise right of membership in all provincial banks except in those of the Punjab and Bengal which have no individual shareholders. The Provincial

Banks of Bombay, the Punjab, C.P. and Berar and Assam have both the primary societies and central banks as members ; but Madras strictly confines its membership to central banks and excludes primary societies while Bengal and Bihar do so practically. Sind has no central banks and so its membership consists only of individuals and primary societies. The Boards of Management in all provincial co-operative banks consist of the representatives of individuals as well as societies, except in the case of Bengal and the Punjab, where they consist of the representatives of shareholding societies. The Registrar of Co-operative Societies is the ex-officio member of the Boards of Management in the case of provincial banks of the Punjab, C.P. and Berar, Bihar and Sind. The Financial Adviser to the Co-operative Department in the Punjab, the Financial Secretary to the Government of C.P. and Berar, and the Financial Adviser to the Provincial Co-operative Bank in Bihar are ex-officio directors of the Bank. In Bengal, the Registrar nominates three members on the Board of Directors of the provincial bank.

(3) *Business.*—There were at the end of the year 1940-41, 8 provincial co-operative banks in British India and two in Indian States of Mysore and Hyderabad. Their membership consisted of 4,537 individuals and 18,838 societies. The total working capital of the provincial co-operative banks in India at the end of 1940-41 amounted to Rs. 13.89 crores of which the share capital amounted to Rs. 79 lakhs (5 per cent.), reserve fund and other funds Rs. 1.57 crores (11 per cent.), deposits from central banks and societies Rs. 4.36 crores (33 per cent.) and deposits from individuals and other sources Rs. 6.53 crores (47 per cent.). Loans from Government amounted to Rs. 59 lakhs (4 per cent.) of which Rs. 34 lakhs were advanced to the Bengal Provincial Co-operative Bank for crop loans to societies and Rs. 24 lakhs to the Bihar Provincial Co-operative Bank under the rehabilitation scheme. The owned funds of the provincial banks formed nearly 16 per cent. of the working capital. However, the position was not so satisfactory in this respect as would appear from the above figures as reserve fund and other reserves in several cases did not represent surplus assets.

Cash balances of the provincial banks amounted to Rs. 80.90 lakhs or about 7 per cent. of the borrowed funds. The percentage of cash to borrowed funds exceeded 10 in the case of 3 lakhs only while in respect of the remaining six, it was below 5 and in the case of three it was even below 1 per cent. This indicates that most of the pro-

vincial banks work on a very low cash ratio. Investments in Government and other securities amounted to Rs. 5.45 crores or about 47 per cent. of the borrowed funds. Though the liquid resources of the provincial banks taken as a whole formed about 54 per cent., the percentage in the case of some banks was far below the average. Loans due by the banks and societies amounted to Rs. 6.65 crores while those due by the individuals amounted to Rs. 34 lakhs. Total loans outstanding amounted to about Rs. 7 crores or nearly 60 per cent. of the borrowed funds. This percentage in the case of Bengal was nearly 80 and exceeded 90 in the case of Bihar. Though the exact extent of overdues or bad debts is not known in the case of all banks, overdues are heavy in the case of all provincial banks, except Madras, Bombay and the Punjab. The present tendency on the part of provincial banks particularly in the C.P., and Berar, Bombay and Sind is to extend their operations on commercial lines. Loans to individuals in the case of the above three provincial banks amounted to about Rs. 21 lakhs at the end of the year 1940-41. This figure has almost gone up to Rs. 46 lakhs at the end of the year 1941-42 and a tendency for further rise in that direction is noticeable. Loans to individuals in the case of these banks are mostly against agricultural and industrial produce. The advances in the case of the C.P. and Berar Provincial Bank are mostly to merchants. The main argument advanced by them for expanding business on commercial lines is that as the channels for co-operative business have dried up, they should undertake commercial business in order to argument their income. The central banks in Bombay too undertake commercial business on a large scale, their advances to individuals at the end of the year 1940-41 having amounted to nearly 37 lakhs or almost 30 per cent. of their total advances. These banks by so doing not only neglect their co-operative business, but run the risk of losses attendant on commercial business for which they are not properly qualified.

The working relation of the provincial banks with other co-operative organisations may be briefly stated here. These banks except in Bombay and Sind, do not advance loans directly to primary societies. The Provincial Co-operative Bank in Bombay, however, acts as a financing agency for societies in 9 districts through 31 branches. The Sind Provincial Bank finances the primary societies directly in the whole province as the central banks in Sind were amalgamated with the Provincial Bank in 1934-36. Though the pro-

vincial co-operative banks do not exercise any control over the management of central banks, they guide their working by offering advice on important matters. In Madras, the reserve funds of central banks are deposited with the Madras Provincial Co-operative Bank. In the C.P. and Berar also the reserve funds of central banks and societies are deposited with the Provincial Bank. Moreover, the Provincial Banks in the C.P. and Berar and Bihar have assumed control over the working of central banks coming under the rehabilitation scheme. In Bombay, the activities of central banks and urban banks are co-ordinated by an Association organised in 1939 called the Bombay Co-operative Banks' Association. In several provinces, provincial co-operative conferences are held under the auspices of the provincial co-operative banks where topics of common interest are discussed and policies formulated. The provincial co-operative banks particularly in Bombay and Madras have assisted the development of special types of societies such as sale societies, marketing societies, housing societies and weavers' societies, by advancing loans, giving grants, and in other ways. The provincial banks form the cornerstone of the co-operative movement, and where their working is sound, they have imparted strength to the whole movement.

IV. Reserve Bank of India and Agricultural Finance

The Reserve Bank of India being the central banking authority of the country is required to maintain close contact with the agencies supplying agricultural finance as well. It has constituted for this purpose a separate Agricultural Credit Department under Section 54 of the Reserve Bank of India Act. The statutory functions of this Department are (1) to maintain an expert staff to study all questions of agricultural credit and be available for consultation by the Central Government, Provincial Governments, provincial co-operative banks and other banking organisations, and (2) to co-ordinate the operations of the Bank in connection with agricultural credit and its relations with provincial co-operative banks and any other banks or organisations engaged in the business of agricultural credit. The Bank was required under Section 55 of the Reserve Bank of India Act to make to the Central Government before the 31st December 1937 a report with proposals, if thought fit, for legislation on the following matters, namely :—

(*a*) the extension of the provisions of the Act relating to scheduled banks to persons and firms not being scheduled banks, engaged in British India in the banking business ; and

(*b*) the improvement of the machinery for dealing with agricultural finance and methods for effecting a closer co-operation between agricultural enterprise and the operations of the Bank.

The Bank has submitted Preliminary and Statutory Reports in which have been described the special features of agricultural finance as well as the part the various agencies such as Government, commercial banks, money-lenders and co-operative banks play in providing it. According to these Reports, the co-operative movement was, on various considerations, the best agency for supplying agricultural finance and although the co-operative movement in India had not so far come upto expectations, it was capable of playing its proper part in the direction of supplying credit facilities to the agriculturists provided it was reconstructed and revitalised. As regards linking up of the indigenous bankers with the Reserve Bank of India, as provided under Section 55(*a*) of the Act, a circular letter was issued to all scheduled banks and indigenous bankers with a view to eliciting their opinion in the matter. In the light of the replies received, the Bank formulated its draft scheme for the direct linking of the indigenous bankers with the Reserve Bank based on the recommendations of the Central Banking Inquiry Committee and the legislation affecting banking companies in the Indian Companies Act. After taking into consideration the replies received, the Bank submitted its report* to the Central Government in which it has been explained why it was not found possible to recommend legislation for extending to indigenous bankers the provisions of the Reserve Bank Act relating to scheduled banks. However, in order to bring the indigenous bankers in closer touch with the Reserve Bank of India, the Bank has extended remittance facilities at concessional rates to approved indigenous bankers. As a further attempt to bring the moneylender within the banking structure of the country, a scheme was prepared by the Reserve Bank for rediscounting bills of approved moneylenders at concessional rates through the scheduled banks drawn for marketing of produce and maturing within nine months from the date of rediscount, provided the benefit of the concessional rate was passed on to the agriculturist. However, due to various reasons, particularly the uncertainties created by the passing debt legislation, the scheme could not be given effect to.

The Reserve Bank of India through the Agricultural Credit Department has, however, maintained close contact with the Co-operative

* Statutory Report, Ch. V.

movement which is the main organised agency in the country for supplying finance to the agriculturists. The Department has undertaken several studies the results of which have been published in the form of bulletins. Its services have also been availed of by the Central and provincial Governments, co-operative banks and other banking organisations by way of consultation. Though the Reserve Bank cannot make long-term advances to co-operative banks and thereby lock up its funds, it is permitted under the Reserve Bank of India Act to purchase or discount bills or promissory notes bearing two good signatures, one of which has to be that of a provincial co-operative bank and drawn or issued for the purpose of financing seasonal agricultural operations or the marketing of crops and maturing within nine months—Section 17(2)(*b*)—or to make advances for periods not exceeding 90 days against such bills or promissory notes —Section 17(4)(*c*). The Bank is also permitted to make advances to provincial co-operative banks upto 90 days against Government and other approved trustee securities—Section 17(4)(*a*). Though the Reserve Bank of India is permitted to make advances to provincial co-operative banks under Section 17(4)(*d*) against promissory notes supported by documents of title to goods, this sub-section has been practically inoperative due to want of warehouses in the country and the non-existence of documents of title to goods. It is understood that the Reserve Bank of India has sanctioned accommodation to some well-managed provincial co-operative banks against Government securities under Section 17(4)(*a*). The Reserve Bank has also prepared a scheme for extending financial accommodation to the central co-operative banks through the provincial co-operative banks for the purpose of financing seasonal agricultural operations or the marketing of crops at special reduced rates under Section 17(2)(*b*) or 17(4)(c) of the Act. There has been some response from the provincial co-operative banks to the scheme and it is understood that one provincial co-operative bank has taken advantage of the facilities offered while another has declared its willingness to do so, when the need arises. However, the problem with the co-operative movement is not want of funds, but want of sound and remunerative sources of investment within the movement. Well managed co-operative banks have ample funds at their disposal and they have always found the Reserve Bank of India willing to accommodate them during times of seasonal stringency or to tide over emergency.

V. Agricultural Non-Credit Societies

Although our primary concern in this chapter is with co-operative finance, a complete picture of the work being done in this direction involves an examination of the working of non-credit societies as well, for the value of the co-operative movement must be judged as a whole, taking into account all its aspects. As noted above, the potentialities of the non-credit side of the co-operative movement were realised somewhat later, but, in recent years, considerable progress has been made in that direction. We may begin with a review of co-operative marketing which has been the most promising feature of the co-operative non-credit movement in several provinces.

(*a*) *Marketing Societies*

Bombay.—Bombay was a pioneer in organising co-operative marketing societies in India, the cotton sale societies of Gujarat and Karnatak occupying a place of pride. There were at the end of 1941-42, 110 sale societies. They sold during the year produce of the value of Rs. 128.18 lakhs. Cotton sale societies have been recently organised in Khandesh district also on the lines of the Gujarat cotton sale societies. There were also sale societies numbering in all 41 for the sale of chilli, mango, paddy and rice, arecanut, fruits, vegetables, eggs, etc.

Besides the sale societies, some work in co-operative marketing is done by the purchase and sale unions, and multi-purpose societies. Total sales effected by the sale unions during the year 1941-42 amounted to Rs. 15.72 lakhs, while multi-purpose societies sold members' produce valued at Rs. 3.96 lakhs. The Bombay Provincial Co-operative Bank and Central Banks also encourage the development of co-operative marketing by opening sale societies, purchase and sale unions, and other societies against the produce stored with them.

In order to co-ordinate the working of various marketing organisations in the Province and to assist them in their business, a Provincial Marketing Society has been started. The Society was registered on the 21st November 1941. During the period ending the 30th June 1942, it sold perishable and other goods worth Rs. 15,965 and pulses and foodgrains worth Rs. 1,43,500.

Madras.—Co-operative marketing has made considerable progress in Madras. There were at the end of 1941-42 in this province 185 marketing societies or loan and sale societies, as they are called in that province. Their membership numbered about 55,000. During the year 1941-42, they issued loans for Rs. 147 lakhs and sold pro-

duce worth Rs. 75 lakhs. They have been given the following concessions for construction of godowns by the Government of Madras.

(1) The grant of loans to cover fully the cost of construction of godowns at a rate of 3 per cent. per annum.

(2) Simple interest for the first five years after which it is to be raised to 3½ per cent. the loan being repayable in equated instalments for a period of 25 years.

(3) Free grants equal to 25 per cent. of the estimated cost of the godowns. This concession has been extended to village credit societies, the limit being raised to 50 per cent.

The Madras Provincial Co-operative Bank has also encouraged the development of these societies by grants of loans at a lower rate of interest as well as by subsidies. The loans granted during 1941-42 amounted to Rs. 96 lakhs, while subsidies during the year amounted to Rs. 29,600.

Besides the loan and sale societies, there are two wholesale societies in the Province, viz., the Madras Provincial Co-operative Marketing Society and the South Kanara Agriculturists' Co-operative Wholesale Society. The former was organised mainly with a view to co-ordinate the activities of the sale societies in the Province. It has, however, not taken up wholesale marketing except in the case of oranges. The value of goods sold by the society during 1941-42 amounted to Rs. 2.35 lakhs. The South Kanara Agriculturists' Co-operative Wholesale Society operates over the whole of South Kanara district. The Society has opened 49 branches where the members' produce is stored and advances are given against it. The value of goods sold during the year 1940-41 amounted to Rs. 10 lakhs.

The United Provinces.—Notable progress has been made recently in the United Provinces in developing co-operative marketing. The ghee marketing societies numbered 693 at the end of 1940-41. These societies sold during the year 4 thousand maunds of ghee valued at Rs. 1.60 lakhs. Government have been assisting the development of these societies by grant of subsidies which during the year 1939-40 amounted to Rs. 25,000.

The greatest strides have, however, been made in respect of societies for the marketing of sugarcane under what is known as the cane development scheme. This scheme was initiated towards the end of 1935 with the help of Government of India grant from the Sugar Excise Fund. Under the scheme, the cultivators were to purchase cane through societies and to pay the societies a commission on their

purchases. Government have engaged a large staff of cane development officers, field supervisors, supervisors for seed stores, etc., to put the scheme into effective operation. The total expenditure on the working of the scheme amounted to Rs. 9,43,870 during the year 1940-41. Various practical steps have been taken under the scheme for the development of cane such as supply of improved seed, establishment of late and early ripening varieties in suitable proportion, introduction of better manuring practice and better methods of cultivation, counteraction against excessive and improper rationing and taking of preventive measures against pests. During the year 1940-41, 6,75,146 maunds of cane seed and 1,35,624 implements were distributed to cane growers. The total quantity of fertilisers distributed was about 1¾ lakhs of maunds valued at about Rs. 6 lakhs. The societies are grouped into central organisations or cane supply unions of which there were 81 at the end of the year 1940-41. The quantity of cane supplied through these unions during the year totalled 1,026 lakhs of maunds or 70 per cent. of the cane crushed by all factories in the United Provinces. The societies besides securing better arrangement for the supply of cane, better price for the produce and bringing about improvement in the crops have also contributed to the welfare of the cultivators in many other ways, such as by contributing from their profits for improvement of roads, medical relief, adult education, etc.

Other Provinces.—Following the example of the United Provinces, cane marketing societies have been organised in Bihar also. The cane development scheme in Bihar is in charge of a Cane Commissioner, who is vested with the powers of a joint Registrar. As many as 1,488 cane growers' co-operative societies and 32 co-operative development and cane marketing unions functioned during the crushing season in 1940-41. These societies claimed a total membership of 37,144 cane growers and supplied to sugar factories 88 lakhs maunds of cane representing 13 per cent. of the total cane crushed in Bihar during 1940-41.

Co-operative marketing has made some progress in the Punjab, the work being mainly undertaken by commission shops which arrange for the sale of produce of members as well as non-members and charge commission. There were at the end of the year 1939-40, 20 commission shops in that Province. They sold during the year 8,17,955 maunds of produce of the value of Rs. 33.59 lakhs. Among sale organisations in the Punjab, special mention may be made of the Okara

Zamindars' Co-operative Society which sold during the year 1939-40 produce worth Rs. 12.64 lakhs.

In Bengal, there were 78 purchase and sale societies at the end of the year 1940-41 among which paddy sale societies occupied a prominent place. Multi-purpose societies which numbered 33 at the end of the year also undertook the work of marketing to a small extent. In the C.P. and Berar, 3 growers' associations undertake the work of marketing of produce on behalf of the agriculturists. An orange growers' co-operative society has also been organised. In the N.W.F.P. there were at the end of the year 40 sale societies of which 32 were primary sugarcane societies.

There has also been some progress in co-operative marketing in Indian States, also particularly in Baroda and Mysore. In Baroda, there were 45 sale societies of which 37 were for sale of cotton. They sold cotton of the value of Rs. 11.62 lakhs during the year 1940-41. There were 14 marketing societies in Mysore at the end of the year 1940-41, for the sale of fruits, potatoes, eggs, paddy, honey, etc. In order to develop co-operative marketing on a wider scale and give fresh impetus to the existing societies Government have recently sanctiond the establishment of Provincial Marketing Society at Bangalore.

(b) *Crop Loan Societies and Controlled Credit*

Crop loan societies have been organised in Bengal and C.P. and Berar in order to provide loans on strictly short-term basis. The loan is repayable at the harvest time and the period of loan does not exceed 9 to 12 months. These societies are more of the nature of credit societies, but as their working contains interesting features and certain useful lessons, separate treatment has been given to them here. In Bengal some 13,000 societies have been organised during the years 1939 and 1940. The liability of these societies is unlimited. The organisation of these societies was rather too rapid and the Registrar of Co-operative Societies had to sound a note of warning in his Administrative Report for the year 1940-41. According to the by-laws of these societies, each member of the crop loan society is required to be a member of a multi-purpose society in his area. The member is to grow crops according to the direction of the multi-purpose society which if necessary may advance him improved seed and agricultural implements for the purpose. The multi-purpose society is also to help the member in marketing his produce. In view of the small number of multi-purpose societies as compared to the

number of crops loan societies organised, it is doubtful if the above by-laws have been put into practice to any material extent in the case of a large number of crop loan societies. These societies are being financed by the Bengal Provincial Co-operative Bank through the central banks out of the advances obtained by the bank from Government for that purpose. During the financial year 1939-40, crop loans for Rs. 20 lakhs were issued and fully recovered. Provision for Rs. 60 lakhs was made by Government in the budget for 1941-42 for this purpose. The working of these societies has disclosed certain shortcomings. It was hoped that the issue of these loans through central banks would enable and encourage members to repay their old debts in an increasing measure and would at the same time leave these banks with some profits on short-term loan transactions. These expectations have not been fulfilled. So, far from improving recoveries of old loans, the issue of short-term loans has in the case of many banks had the effect of reducing them, partly because the collecting staff of the banks devoted its attention primarily to the collection of short-term loans and collection of old loans fell into the background and partly because members seemed to think that in order to obtain crop loans again it was necessary to repay only crop loans due and that it was no longer essential to repay old loans. Further, the central banks have found the margin in rates of interest too inadequate to cover the collection charges and have consequently incurred losses in this business. The Registrar of Co-operative Societies, Bengal, has issued necessary instructions to his staff to devote equal attention to the collection of old loans as in the case of crop loans and has suggested that the rate of interest on crop loans may be raised in order to provide adequate margin for the central banks and societies.

There were in the C.P. and Berar 357 crop loan societies at the end of the year 1940-41 of which 326 societies were with unlimited liability and 31 societies with limited liability. Total loans outstanding on 30th June 1940, amounted to Rs. 78,929. Loans amounting to Rs. 54,107 were advanced during the year 1940-41 and recoveries effected during the year amounted to Rs. 51,299. Overdue loans amounted to Rs. 49,408 at the end of the year. The working of these societies is far from satisfactory as can be judged from the heavy overdues.

The success of the crop loan societies depends mainly on the extent to which their working is linked up with that of the marketing societies and other efforts made in the direction of raising the income

of the agriculturist. In Madras a controlled credit scheme has been put into operation in almost all the districts. Under this scheme the loans are advanced for cultivation expenses only and the borrower is required to sell his produce through the loan and sale society. The success of the scheme has been mainly due to the fact that efficient marketing organisations (the loan and sale societies) already exist in Madras, and fulfil the basic requirement of controlled credit, viz., co-ordinating credit with marketing. In other provinces also, particularly in the United Provinces, Bombay and the Punjab, attempts are being made to restrict fresh advances for short-term purposes and to link credit with marketing.

(c) Other Agricultural Non-Credit Societies

(i) *Better-living Societies.*—Better-living societies have been organised in several provinces and States and they have formed in many cases a nucleus for rural development and uplift activities. Considerably good work has been done under their auspices as part of the rural reconstruction programme. Roads have been improved, public wells have been dug, tanks have been cleared, dispensaries have been established, schools opened, propaganda for curtailment of ceremonies expenditure has been conducted, village sanitation improved, better seed distributed, better method of cultivation introduced and the breed of cattle has been improved. Better-living societies were first organisd in the Punjab and its example was followed by the United Provinces. In fact the organisation of these societies in the United Provinces has been almost at an alarming speed, the number of societies at the end of the year 1940-41 being 5,728 as compared to 1,872 in the Punjab. The rapid organisation of better-living societies in the United Provinces has been the result of a drive for rural reconstruction work in the province undertaken by the Rural Development Department. There were also 552 societies in Bengal, 123 in Sind and 32 in Bombay.

(ii) *Better-farming Societies.*—Better-farming societies attempt to improve agriculture by giving better seeds, manure, implements, etc., to their members. There were 216 societies in the Punjab and 36 in Bombay. The cane-growers' societies in the United Provinces and Bihar are also instances in point. In Madras, there are agricultural demonstration and improvement societies numbering 43 doing similar work.

(iii) *Irrigation Societies.*—The co-operative irrigation societies having for ther object the construction of new sources of irrigation

and the improvement of the existing ones have done important work in Bengal. There were at the end of the year 1940-41, 1,070 societies with membership of 23,072 and an area under irrigation about 1½ lakhs of acres. These societies undertake the work of excavation of tanks and erection of irrigation embankments for the storage of water flowing down from higher levels. Some progress in this direction has also been made in other provinces, viz., Madras, the United Provinces, the Punjab and Bombay.

(iv) *Crop protection Societies.*—Bombay is the only province which has a number of crop protection societies. In 1941-42, there were 42 such societies out of which 12 were for fencing of farms. Thirty more societies have been recently organised in the province.

(v) *Colonisation Societies.*—Co-operative societies for colonisation of unoccupied land have been formed in Madras and Travancore. They work on land taken from Government on certain terms. The societies either distribute the land amongst their members or cultivate the whole land jointly. The society is responsible to Government as a tenant. Six such societies are operating in Madras and three in Travancore.

(vi) *Milk unions and Societies.*—Milk unions and societies have been organised in several provinces, particularly Madras, Bengal and the United Provinces in order to solve the problem of milk supply in towns. These societies not only make pure milk available at moderate rates to town-dwellers but assist producers who supply milk to obtain fair prices for their product. The societies which are in the producing centres are generally affiliated to a milk union situated in the urban area for the purpose of the distribution and sale of milk. In Madras there were at the end of the year 1940-41, 104 milk societies and 17 milk unions. The value of milk and milk products sold by societies and unions during the year amounted to Rs. 6.44 lakhs and Rs. 6.88 lakhs respectively. In this connection the working of the Madras Co-operative Milk Union deserves special mention. The Union had 14 societies affiliated to it, and sold milk of the value of Rs. 2.67 lakhs to the public during 1939-40. In Bengal, there were 223 milk societies and 14 milk unions at the end of the year 1940-41. The Calcutta Milk Union which is the pioneer union and the largest sold during 1940-41 milk of the value of Rs. 3.55 lakhs. In the United Provinces there were 25 milk societies of which 16 were in Lucknow all of which were affiliated to the Lucknow Milk Union. It sold during the year 9,658 maunds of milk, 41 maunds of butter, 82

maunds of ghee, 141 maunds of cream and 2,275 maunds of separated milk. There were also some societies in the C.P. and Berar and Bombay though there is nothing special to report about them.

(*vii*) *Crop insurance.*—Though the need for providing against failure of crops is realised, no serious attempt seems to have been made in organising crop insurance in any part of India. However, in Mysore State, a scheme for grain insurance was prepared in 1919, but it does not seem to have been put into operation. Surveys were also conducted in the Baroda State with a view to framing some scheme for crop insurance in respect of wheat and rice but no further progress seems to have been made in that direction. In the Punjab, some attempts have been made to provide relief to the agriculturist in the event of failure of crops and for that purpose crop failure and relief societies have been organised. Such societies numbered 90 with membership of 1,761 at the end of the year 1938-39. These societies were, however, of the nature of thrift societies and not in any way insurance societies. They encourage savings in good years from members and return them in years of famine and scarcity. They do not spread the risk and do not offer insurance cover against failure of crops.

(*viii*) *Cattle insurance societies.*—Cattle insurance societies were organised in the past in some provinces in India such as Burma, the Punjab, Bombay and Coorg. But except in Burma, they never reached an advanced stage. In Burma, a co-operative cattle insurance scheme was introduced as early as 1911. The scheme flourished for several years and by 1925 nearly 400 cattle insurance societies and one cattle re-insurance society had been registered. But from 1925 onwards there was a marked decline in this class of societies due to three causes which were the failure of local primary agricultural credit societies (of which the cattle insurance societies were in reality offshoots), lack of proper supervision and control by the officers of the Co-operative Department and, finally, failure on the part of the members of the societies to understand and appreciate the basic principles of agricultural insurance. There were during 1940-41, 161 cattle insurance societies in Burma with membership of 2,051 and funds amounting to Rs. 12,124. Most of the societies were in dormant state and were marked down for liquidation. In the opinion of the Calvert Committee on Co-operation in Burma, cattle insurance was a branch of co-operative activity too advanced for the type of members in Burma and the Committee recommended that it should be closed down.

VI. Non-Agricultural Societies

Though co-operation was organised mainly for the agriculturists, people from the non-agricultural classes were not slow to realise its benefits. Non-agricultural societies numbered 17,442 at the end of the year 1940-41 with a membership of about 19 lakhs. Their working capital amounted to Rs. 28.52 crores. Credit societies numbered 7,071 ; purchase societies and purchase and sale societies (consumers' stores) 1,251 ; production, production and sale societies 1,498 and others 7,622. Their share capital amounted to Rs. 6.58 crores, while their reserve and other funds amounted to Rs. 2.43 crores and Rs. 1.66 crores respectively. Deposits from members and non-members amounted to Rs. 9.29 crores and Rs. 6.60 crores, while loans from provincial and central banks amounted to Rs. 1.22 crores. Loans to members amounted to Rs. 19.72 crores at the end of the year of which loans for Rs. 2.94 crores were overdue.

The above figures show that the co-operative movement is much healthier on the non-agricultural side than on the agricultural side. This is due to the fact that the urban co-operative movement has made headway mainly among the middle class people in India while its development among industrial labour is insignificant. These people have relatively more stable sources of income and are more enlightened and therefore more responsive to the co-operative methods. These elements are lacking to a large extent among people of rural areas.

Artisans' and weavers' societies which have an important bearing on rural economy have, however, made commendable progress in Madras, Bombay, the Punjab and the United Provinces, particularly since 1935 when the Government of India took up the problem of reviving the industry by giving subsidies to the Provincial Governments. The Madras Handloom Weavers' Provincial Co-operative Society was started in 1935 under the Government of India subvention scheme. The number of societies increased rapidly from 132 in 1937-38 to 194 at the end of the year 1940-41. The society helps the member societies through grants for meeting the cost of management in the initial stages, purchase of looms, arranging for supplies of yarn, technical advice for improvement of goods, advances against finished articles and assistance in marketing them. The value of raw materials purchased by the societies during the year 1940-41 amounted to Rs. 6.52 lakhs while the value of goods sold amounted to Rs. 14 lakhs.

In Bombay, there were 38 weavers' societies at the end of the year 1940-41 with membership of 2,073. During the year they sold goods worth Rs. 1.14 lakhs. In order to assist the development of these societies further, industrial associations have been organised. They number 9 at present. A sales depot has also been established in Bombay City for the sale of handloom cloth produced under the aegis of the various associations.

There were in the Punjab 356 industrial societies at the end of the year 1940-41 of which weavers' societies numbered 207. Their total turnover during the year amounted to Rs. 10 lakhs. There is one industrial co-operative bank and 4 industrial unions. Industrial societies have also been organised in the U.P. and these societies have received special impetus on account of the large orders received from the Indian Stores Department. The U. P. Government, besides employing an additional staff to promote the work of these societies have placed at the disposal of the Registrar an interest-free advance of Rs. 12 lakhs to finance these societies.

The rest of the non-agricultural co-operative movement is mostly confined to the urban areas and hence outside the scope of this book.

C. Land Mortgage Banks.

The framers of the Co-operative Credit Societies Act of 1904 had realised the difficulties in the way of these societies being called upon to undertake long-term financing on the basis of land mortgage security. These societies get funds on a short-term basis, and they work mainly on the principle of capitalising personal credit. It was felt, however, that this should not prevent them from accepting mortgage securities as collaterals, for, otherwise, the members would have to resort to the moneylender for such loans. Experience of the working of co-operative societies showed that these institutions could not afford to tie up their slender resources in a form of security which could not be readily realised nor undertake risks which might involve them in legal proceedings attendant upon foreclosure. For lending on a long-term basis and for helping in the liquidation of old debts, a financing agency with wider resources was, therefore, necessary. The solution suggested was the establishment of institutions on the model of the land mortgage banks in Germany.

Growth

The first land mortgage bank in India was organised in 1920 at Jhang in the south-west Punjab and a few more came into existence subsequently in that province but none of them proved successful.

However, a real beginning of land mortgage banking in India was made with the establishment of the Central Land Mortgage Bank in Madras in 1929 for centralising the issue of debentures and for co-ordinating the working of primary banks in that Province. The progress made by land mortgage banks becomes evident from the fact that there were at the close of the year 1941-42, 119 primary banks in that province. The loans outstanding from primary banks at the end of the year amounted to Rs. 258.83 lakhs. There were no arrears in respect of loans to the primary banks though primary banks had arrears of a small sum of Rs. 1.54 lakhs. The Bank has since its inception to the end of the year 1941-42 floated debentures of Rs. 359.77 lakhs of which debentures for Rs. 273.95 lakhs were outstanding on 30-6-42. The success achieved by land mortgage banks in Madras has been mainly due to caution exercised in sanctioning loans, existence of settled and surveyed areas with irrigation facilities, generous assistance given by Government and grant of special privileges for recovery of defaulted instalments under the Madras Land Mortgage Banks Act.

In Bombay, a central land mortgage bank was organised in 1935 on the lines of Madras to finance primary banks in the province. The Bank had debentures of Rs. 30 lakhs outstanding on the 30th June 1942 and loans due from primary banks amounted to Rs. 30.82 lakhs of which loans for Rs. 28,626 were in arrears. There are at present 17 primary banks in the Province.

Land mortgage banking has not made much progress in other provinces. There were 21 primary banks in the C.P. and Berar at the end of the year 1941-42. They are being financed by the C.P. and Berar Provincial Co-operative Bank. The debentures issued by the bank amounted to Rs. 15 lakhs while loans outstanding against primary banks at the end of the year 1941-42 amounted to Rs. 13.56 lakhs of which loans for Rs. 11,449 were in arrears. In Bengal, there were 9 primary banks at the end of the year 1941-42. They are at present being financed by the Bengal Provincial Co-operative Bank. The Bank has not issued any debentures so far for financing these banks. The loans outstanding against members in the case of primary banks amounted to Rs. 6.56 lakhs at the end of the year 1941-42 of which loans for Rs. 43,455 were in arrears. In Orissa, a provincial co-operative land mortgage bank was organised in 1938-39 which, however, finances agriculturists directly through branches. There are also small land mortgage societies in the United Provinces, Assam and

Ajmer-Merwara which obtain their funds by way of deposits from the public and loans from the central banks.

Land mortgage banks have made some progress in Indian States, particularly in Mysore, Cochin and Baroda. A central land mortgage bank was organised in Mysore in 1929. There were at the end of 1941-42, 65 primary banks in the State. The Bank had debentures of Rs. 15.11 lakhs outstanding at the end of the year, while loans due from primary banks amounted to Rs. 16.22 lakhs. In Cochin, a land mortgage bank was organised in 1935 to finance the agriculturists directly. It had debentures of Rs. 15 lakhs outstanding at the end of the year 1941-42, while loans outstanding from members amounted to Rs. 18.56 lakhs. There were also 2 land mortgage banks in Baroda State with debentures of Rs. 5 lakhs and loans due from members of Rs. 7.87 lakhs outstanding at the end of the year 1941-42 with absolutely no arrears or overdues. Statements I and II below show the position of land mortgage banks (central as well as primary) as at the end of the year 1941-42.

TABLE I

Operations of Central Land Mortgage Banks in India, 1941-42.

Province or State.	Share capital paid up.	Reserve fund.	Other funds.	Debentures issued since inception.	Debentures outstanding at the end of the year.
	Rs.	Rs.	Rs.	Rs.	Rs.
Madras	9,71,600	3,89,695	3,57,843	3,59,77,600	2,73,95,700
Bombay	4,92,700	10,504	3,827	30,00,000	30,00,000
Mysore	1,38,700	17,536	20,941	16,43,700	15,11,000
Total ...	16,03,000	4,17,735	3,82,611	4,06,21,300	3,19,06,700

Province or State.	Loans issued during the year.	Loans outstanding at the end of the year.	Overdues.		Profits during the year.
			Principal.	Interest.	
	Rs.	Rs.	Rs.	Rs.	Rs.
Madras	40,32,100	2,58,84,079	......	......	1,99,452
Bombay	5,54,055	30,82,860	28,626	......	20,092
Mysore	3,28,467	16,24,232	1,197	......	29,239
Total ...	49,14,622	3,05,91,171	29,823	......	2,48,783

TABLE II

Operations of Primary Land Mortgage Banks in India (including the Provincial Co-operative Land Mortgage Bank of Orissa) 1941-42.*

Province.	Number of societies.	Number of members.	LOANS.			OWNED FUNDS.				BORROWINGS.						Profit.
			Loans advanced during the year.	Loans outstanding at the end of the year.	Of which overdue.	Share capital.	Reserve fund.	Other funds.	Total	Central L.M.B.	Provincial C. Bank.	Other co-operative banks.	Debentures.	Other sources.	Total	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ...	119	69,158	40,40,114	2,63,78,791	1,10,950	18,63,317	3,34,628	60,157	22,58,102	2,58,63,030	......	......	1,30,000	......	2,59,93,030	1,84,576
Bombay ...	17	13,621	5,58,398	33,31,203	89,992	3,44,460	38,781	24,980	4,08,221	31,76,138	......	......	......	16,893	31,93,031	16,609
Bengal ...	9	2,769	34,120	6,56,056	43,455	56,336	7,018	2,392	65,746	......	6,14,962	......	......	......	6,14,962	2,850
Orissa	1	657	55,778	1,34,803	......	61,005	2,307	4,715	68,027	......	......	......	......	1,00,000	1,00,000	3,875
U. P. ...	5	838	65,013	2,02,956	11,674	31,477	6,708	5,680	43,865	......	......	86,462	......	84,459	1,70,921	5,082
Punjab† ...	10	3,943	93,271	9,28,848	5,73,272	90,270	63,848	20,106	1,74,224	......	10,25,617	......	......	13,161	10,38,778	—30,650
C. P. and Berar	21	6,788	6,15,924	15,76,859	91,414	1,23,531	11,055	6,637	1,41,223	......	13,60,080	......	......	95,393	14,55,473	15,001
Assam ...	4	1,767	3,850	2,30,850	2,26,363	85,895	25,102	58,074	1,69,071	......	......	600	......	2,12,604	2,13,204	11,304
Ajmer Merwara	12	1,221	9,457	89,631	1,898	6,780	7,228	—4,621	9,387	......	......	51,276	......	24,059	75,335	—343
Mysore ...	65	8,531	3,61,765	15,73,387	6,848	1, 66,554	6,846	19,980	1,93,380	15,75,522	......	......	......	......	15,75,522	12,717
Baroda ...	2	2,243	1,45,525	7,87,490	474	1,83,325	14,419	37,000	2,34,744	......	......	20,100	5,00,205	1,46,170	6,66,475	25,023
Cochin ...	1	2,575	2,74,759	18,29,700	26,665	83,190	2 0,000	18,787	1,21,977	......	......	......	15,00,000	2,86,705	17,86,705	18,850
Total	266	114,111	62,57,974	3,77,20,574	11,82,505	30,96,140	5,37,940	2,53,887	38,87,967	3,06,14,690	30,00,659	1,58,438	21,30,205	9,79,444	3,68,83,436	2,13,994

*The Orissa Provincial Co-operative Land Mortgage Bank has been included in this Table as it finances the agriculturists directly like any other primary land mortgage bank.

† 1940-41 figures in the case of the Punjab P.L.M. Banks.

Method of working

Land mortgage banks in Madras, Bombay, the C.P. and Berar, Mysore, Cochin and Baroda obtain the bulk of their finances by the issue of debentures which are guaranteed for principal and interest by the Governments of the respective Provinces and States and rank as trustee securities. There has been some difference of opinion between the Reserve Bank on one side and the Provincial Governments and the Land Mortgage Banks on the other regarding the continuation of Government guarantee of debentures over a long period. The Bank has advised that at a certain stage the guarantee of interest and capital from Government should cease in order to make the movement sound and self-supporting ; the latter agree to this in principle but they consider that it is too early to put the advice into practice at present. On this account the recognition of the debentures of the land mortgage banks for purposes of loans against them by the Reserve Bank has been kept in abeyance. Central land mortgage banks in Madras and Bombay and the Provincial Co-operative Bank in the C. P. and Berar have constituted sinking funds for redemption of debentures issued by them. Land mortgage banks in other provinces obtain their finance by way of deposits from the public or loans from the central banks and other sources. Land mortgage banks in India grant loans upto the maximum period of 20 years as the debentures floated by them have similar maturity. They have so far advanced loans mainly for redemption of old debts though the need for encouraging loans for land improvement is recognised in all provinces Special legislation for the proper working of land mortgage banks and for enabling them to recover their defaulted loans without recourse to courts has been passed in Madras, the C.P. and Berar, and Orissa while the existing Co-operative Societies Act in Bombay and Bengal have been amended so as to include special provisions for the proper working of land mortgage banks in the above respects. Land mortgage banks in India have received assistance from the Government of the respective provinces and states in the form of subsidies for meeting the deficits in the initial stages of their working, exemption in part or whole from payment of stamp duty or registration fees, free supply of village maps, etc. Their working is largely supervised and controlled by the Registrar of Co-operative Societies.

Defects in their working and suggestions for improvement

These banks have practically confined their operations to advancing of loans for redemption of old debts. Even in this sphere, the progress made by them appears small, relatively to the magnitude of the problem. In Madras, where land mortgage banks have been working with comparative success, their operations are restricted to irrigated areas while for the dry area of the province long-term funds are supplied by the Government under the Agriculturists' Loans Act. In other provinces, the loans advanced by land mortgage banks form an insignificant part of the rural debt and have not touched even the fringe of the problem. Even within this limited sphere, the land mortgage bank loans have not done lasting good to the agriculturists. Experience has shown that in a number of cases, the borrowers relapse into debts even after their debts have been once cleared off by land mortgage banks. A cultivator who is habitually running into debt cannot be saved merely by the grant of longer instalments with lower rates of interest. There is certainly danger in granting loans without any knowledge regarding the character of the borrower. The old co-operative ideal of requiring a man to undergo a period of probation in a co-operative society and to prove his fitness before liquidating his old debts deserves to be followed by land mortgage banks. It is desirable that before a person is granted a loan by a land mortgage bank, he should have been a member of a village society and that he has proved his fitness for the purpose by punctual repayment of loans and by developing habits of thrift. Even after a loan is granted by the land mortgage bank, he should continue to be a member of a multi-purpose society so that he can obtain short-term finance as well as arrange for sale of his produce jointly with other members of the society. This would incidentally assist the land mortgage bank to recover the annual instalment through the society. A fuller benefit from land mortgage bank loans is likely to be obtained only if there is closer co-ordination between various co-operative organisations and the borrower is taught to get his various needs such as credit, supply, marketing, etc., served co-operatively. Moreover, it has been noticed that borrowers of land mortgage banks do not get full benefit by way of reduction in their debts as provided under various debt legislations. It is therefore desirable that before a loan is sanctioned the debts should be scaled down by the debt conciliation board established under the statute, or that the debt conciliation boards set up by the land mortgage banks should be statutorily recognised for scaling down

the debt. Closer co-ordination between debt conciliation boards and land mortgage banks is therefore essential.

Land mortgage banks in India have hitherto paid very little attention to advancing loans for productive purposes, such as purchase and improvement of lands or method of cultivation or adding to the equipment of farming. No doubt, the existence of uneconomic and scattered holdings in the case of the small agriculturists who constitute the backbone of the country and the lack of interest in lands on the part of bigger landlords are hindrances in the way of undertaking large-scale improvements in lands. Moreover, where agriculturists are anxious to improve their lands or their methods of cultivation, they have no knowledge as to what improvements are likely to be economically beneficial to them. There is also no agency to assist them in planning and carrying out the works of improvement. Enquiries made a few years back showed that Agricultural Departments in most of the provinces were not in touch with the land mortgage banks and they hardly recommended any loans for carrying out land improvements. In view of the imperative need in a predominantly agricultural country like India for improving lands and methods of cultivation which would directly raise the income from land and ultimately assist the agriculturist in rehabilitating his occupation, it is essential that various departments of Government should work in close co-ordination and should establish contact with land mortgage banks and other organisations working for the benefit of the agriculturists. Thus, the Agricultural Department can suggest improvements likely to be useful to the agriculturists in different areas, the Engineering Department can draw out schemes as well as supervise the work of land reclamation or of small irrigation works, and the Co-operative Department can assist the agriculturist in consolidating his holdings and in obtaining a loan from the land mortgage bank for carrying out improvements. In the case of some improvements, such as raising of a bund or construction of a canal or fencing which can be carried out by a group of farmers, the Co-operative Department can help them in organising societies for the purpose. It can also assist farmers in obtaining land at concessional rates from Government or landlords or long-term leases for jont cultivation. It can float loans for the establishment of co-operative factories for processing of crops or the development of areas under local Government such as village water works and similar other projects of proved utility. Thus, land mortgage banks have an important role

to play in the rural economy of India if they can, in this manner, be made a part of a wider movement for the rehabilitation of agriculture.

The Co-operative Movement—Conclusion

To conclude our survey of the co-operative movement, we may state that while the movement has contributed to a lowering of the interest rates in the rural areas and has helped to inculcate the virtues of thrift and self-help among the villagers to some extent, on the whole, it has failed to produce the results originally expected of it. For, co-operation has been understood so far in a narrow sense and has failed to deal with the man as a whole in respect of all his requirements. In the West, co-operative action has proved how it can, "transform the whole human being, his personality, character, attitude to the community and attitude to life . . . Roughly outlined in this way, the rural co-operative society is seen not only as a factor in technical progress and material well-being ; it is seen also to be an instrument of economic organisation, of vocational training and discipline, a centre of spiritual life and general education, a cell in the new social tissue which is re-establishing or carrying on that vital, solid cohesion and systematic collective defence which family feeling, neighbourliness and the tradition of mutual help kept alive in the old village communities."*

Judged in the light of these standards, the achievement of the movement in India appears as yet small. Much has indeed been done in recent years to rehabilitate the movement after the crisis which overtook it as a result of the economic depression, but it would be wrong to believe that better prospects for the movement are now assured, unless steps are taken to reform it in several ways. As the Russell Report makes it clear, the fact that co-operation has been a great success in a country of small farms like Denmark is no proof to similar prospects of success in India. The credit for the success of the movement in Denmark goes to four important conditions which obtain in that country but are absent in our own. Firstly, the Danish rural community is homogenous and has nothing corresponding to our caste system. Secondly, all cultivators are literate as against hardly 3 per cent. in our rural areas. Thirdly, the Peoples' High Schools, which have been set up almost simultaneously with the co-operative movement, teach the farmers better living and inculcate into them ideas of corporate responsibility in village and national life. Lastly, the co-operative societies are mostly trading societies

* "Co-operative Action in Rural Life," Survey prepared by the Co-operation Department of the International Labour Office, pp. 30-31.

which organise the sale of the cultivator's produce and supply him with all his necesssries in the home and the farm. Moreover, the financing of these societies is done by the local savings institutes and banks where the members of the co-operative societies themselves deposit their savings ; as a result of this arrangement, repayments to the society are prompt since each member of the society is also anxious about solvency and credit of the savings bank. It is owing to the absence of such favourable factors that we hear the oft-repeated comment that the movement has touched hardly the fringe of the problem and that not even 2 per cent. of the population has been brought under its banner. In any planning of the co-operative movement, the creation of the above-mentioned conditions must find a prominent place. It is also necessary that our policy should be guided as much by practical wisdom as by idealistic enthusiasm, particularly as it has been observed that " probably these conditions are rarely obtainable, and, excepting where, as in Bombay and the Punjab, a firm business directorate takes control, it seems unlikely that such can be expected from co-operative enterprise."*

CHAPTER XII
MONEYLENDER-FINANCE AND DEBT LEGISLATION

THE dominating influence of the moneylender on rural finance, the consequences of his business being left unregulated for a long time and the growth of rural debt have already been noted in an earlier section. Here we shall concern ourselves with the measures adopted so far to regulate moneylending and to scale down rural debts.

THE DECCAN AGRICULTURISTS' RELIEF ACT

In Bombay, agrarian discontent led, in 1875, to an uprising of a large number of people in 45 villages in the Poona district and in 22 villages in the Ahmednagar district against the moneylending classes who were forced to surrender the bonds and other securities which were burnt in the open. As a rsult of the recommendation of the Commission appointed to inquire into the riots, the Government passed the Deccan Agriculturists' Relief Act in 1879 for restricting alienation of land and restraint of usury. This Act authorised the Courts to examine the history of the farmer's debt in suits against him, to make an estimate of the sum actually due and to withhold unreasonable rates of interest. It protected the debtor from arrest and from sale of land unless it was definitely pledged. It also provided

* Russell Report, pp. 62-8.

for the restoration of lands to the debtor under certain circumstances even if there was a sale deed between the debtor and the creditor. An agriculturist owing more than Rs. 50 could be declared insolvent on application. The Act also provided for the appointment of debt conciliators. The Amendment Act of 1882 provided for the redemption of debts before the due date mentioned in the bond and empowered debtors to sue for accounts without seeking the redemption of mortgaged lands.

A Commission appointed in 1892 to enquire into the working of the Act reported that conciliation had only been misused in favour of the creditor. The Government adopted one amendment after another to cure the Act of its defects but the provisions were evaded by the creditors by over-writing the bonds or by acquiring the lands under different forms of sub-leases so as to avoid the risk of these being interpreted by the Courts as mortgages. The results of the Act were so disappointing that another Commission in 1912 as also the Bombay Banking Enquiry Committee recommended its repeal and its replacement by a new Act.

Restrictions on Transfer of Land

The passing of lands from cultivators to non-cultivators was a feature not confined to Bombay alone. For several reasons, the land values were rising rapidly since the advent of British rule in India. For instance, at the time of the annexation of the Punjab, the average value of an acre of land in the Province was six times the land revenue ; in 1938-39, it was 283 times. The moneylenders therefore willingly and freely advanced loans to the agriculturist, got him into the coils of debt, forced him to offer a mortgage as security and, finally, resorted to foreclosing. With the passing of the Registration of Documents Act (1864) and the Transfer of Property Act (1882), the law came to the aid of the moneylender in expropriating the cultivator all over India. By 1874, in the Punjab alone, a million acres were mortgaged and by 1891 the figure had gone up to 4 million acres. The money was advanced on such hard terms that the mortgages generally ended in sale. Thus the Famine Commission of 1880 recorded the evidence of Sir A. Mackenzie, the Chief Commissioner of the Central Provinces, that in every district through which he had marched he was beset by " unfortunate men anxious to spread before him their little bundle of decrees, for many times their original loan, then sale and after that, the heart-breaking hunting of the camps and footsteps of the higher officials who can do nothing but send the

petitioner away as he came." In the Punjab, between 1875 and 1893, the moneylenders acquired 1,179,000 acres in different parts of the Province and in the single district of Gujranwala they purchased over half the land sold during the period.* This evil of mortgage debt and alienation of land soon assumed vast proportions and the agrarian discontent found expression in several peasant risings in Bombay, Bengal, Oudh, Ajmer and other parts of the country. Yet no action was taken until 1895 when after consideration of the report on the Deccan Agriculturists' Relief Act, the Government of India addressed local Governments and suggested that some restriction on the alienation of land was desirable. As a result, the Punjab Land Alienation Act of 1900, the Bundelkhand Land Alienation Act of 1903 (U.P.), the N.W.F.P. Land Alienation Act of 1904 and the Central Provinces Land Alienation Act of 1916 came to be passed. In general, these Acts laid down that lands mortgaged to a member of the non-agricultural class could remain in force only for a limited number of years, whereafter they were to be returned to the mortgagor free from all encumbrances. In the Punjab, the mortgagor could redeem his lands at any time during the currency of the mortgage, by depositing a certain proportion of the debt as the Deputy Commissioner may determine to be equitable, provided the mortgage was in the form permitted by the Land Alienation Act. In order, therefore, to facilitate the redemption of other mortgages by summary procedure, the Redemption of Mortgages Act was passed in 1913. This Act empowered the Collector, on petition by the mortgagor, to summon the parties to attempt to arrive at a settlement and to order redemption if he was satisfied that the mortgagor had paid the mortgagee a proper sum on account of debt. Under the recent Punjab Restitution of Mortgaged Lands Act (1938), a mortgagor can present, subject to certain conditions, a petition to the Collector praying for redemption of land mortgaged prior to 8th June 1901.

These measures, however, failed in their main object, particularly for the reason that the law permitted the transfer of land from the debtor to a moneylender if he was an 'agriculturist.' Nor were *benami* transactions uncommon in which a professional moneylender got the land mortgaged in favour of another agriculturist and received the rent through him. Indeed, as foreseen by one of the members of the Select Committee on the Punjab Bill, there appeared "monster fishes in the agricultural community . . . encouraged by law to swallow

* Darling: "The Punjab Peasant in Prosperity and Debt," p. 288.

smaller fishes." The Land Alienation Act was thus increasingly availed of by the landlord to add to his acres at the expense of the peasantry. The benefit of the Punjab Redemption of Mortgages Act was also limited, as the operation of the Act was restricted to mortgages the principal sum secured under which did not exceed Rs. 1,000 whatever the area of land mortgaged, or to mortgages of land not exceeding thirty acres in area.

That the law failed even in the Punjab, the pioneer Province to pass the Act, is an indication that the measure was not sufficiently comprehensive. It could not stop the evil of alienation of land nor the growth of rural debts. In fact the area under mortgage increased even during the pre-depression years though the contrary ought to have been the case, as more credit could be then raised by mortgaging less lands. After the depression, the mortgaged area further increased while the amount raised thereon declined as is seen from the table below :*

Average of 5 years.	Total area mortgaged by agricultural tribes.	Mortgage money per rupee of revenue of area mortgaged.
	Acres.	Rs.
1902-1906 ... ... (Average of 4 years only)	1,89,810	62
1906-1911	2,39,608	83
1911-1916	2,65,274	86
1916-1921	2,59,826	108
1921-1926	2,94,458	128
1926-1931	2,98,013	116
1931-1936	3,27,835	84

Between 1891 and 1921, the amount of the mortgage debt of the Province increased by as much as Rs. 25 crores. In the following decade a burden of another Rs. 31 crores was added. In 1931, only 17 per cent. of the landowners were free from debt, the average debt per indebted proprietor in that year being Rs. 600 as against Rs. 463 in 1919. The total debt of proprietors was about Rs. 120 crores or twenty-two times and a half the land revenue, and representing at

* Report on the Land Revenue Administration, Punjab, 1938-39. Statement No. XXVII.

least a year's gross income of those supported by agriculture, or between 5 and 6 years' net income.*

The situation in other provinces was not far different from that in the Punjab. The following figures in some of the provinces given by the Banking Enquiry Committee show that even mortgage debts have now come to bear a large proportion in the total indebtedness of the people.†

	Total indebtedness (Rs. in crores).	Percentage of mortgage debt to total agricultural debt.
U. P.	124	56
Madras	150	50
Bengal	100	45
Punjab	135	43
Bihar and Orissa	155	40
Bombay	81	28-36
C. P. and Bihar	36½	27½

It has to be noted also that Land Alienation Acts have not been passed in all provinces despite the fact that the Royal Commission on Agriculture recommended a move in this direction.

Regulation of Accounts

The need for regulating the moneylender's business was emphasised by the Royal Commission on Agriculture which commended the principles underlying the Punjab Regulation of Accounts Bill (subsequently passed into an Act of 1930) and the British Moneylenders' Act of 1927 to the consideration of the Provincial Governments.‡ In 1934, the Government of India called a Conference of representatives of the provincial Governments which decided that the matter should be left to the discretion of the local authorities. Since that year, almost every Province has passed laws to regulate the maintenance of accounts by the moneylender. These laws, though not

* *Cf.* M. L. Darling: "The Punjab Peasant in Prosperity and Debt," pp. 9-10.

† In 1938, two Acts were passed in the Punjab to amend the Land Alienation Act. One of these amending Acts enabled the Deputy Commissioner to determine finally whether any person was to be deemed to be a member of an agricultural tribe for the purpose of the Act, and to set aside *benami* transfers intended to evade the provisions of the Act. The other amending Act was intended to check the permanent alienation of land to agriculturist moneylenders by their debtors, with a view to placing the former class for the purposes of the Punjab Alienation of Land Act in the same category as non-agriculturist in the matter of permanent alienation of land by agriculturists.

‡ Report, para 366.

uniform, generally provide for maintenance of proper registers of transactions by the moneylender showing the amount of each debtor separately, to supply the debtor, periodically or on his requisition a statement of account in respect of each transaction and showing him the outstanding amount of principal and interest, and to issue receipts. Failure to comply with these regulations makes the creditor liable to the loss of interest (wholly or in part) found due, as also of costs of suits for the recovery of arrears. In the Punjab, the penalty is dismissal of the suit, whereas in Assam, Bihar, Orissa, Bombay and the U.P., the entry of a fictitious amount in excess of the actual amount loaned out has been made an offence punishable with a fine.

These Acts, however, have not been successful, for the main reason that the debtor himself is not in a position to plead the fact of his not having been supplied with accounts or receipts. Moreover, the moneylender too tries to settle disputes without going to courts which would disallow him interest and costs. Again, whenever the debtor has had recourse to courts, his own ignorance has made it difficult for him to prove his claims.

Regulation of interest

The early laws which authorised the courts to pass decrees sanctioning the rates agreed to in the contract gave a stimulus to the usurious practices which had already come into vogue after the disintegration of the rural community. When attempts were made to check them by having certain provisions in the Deccan Agriculturists' Relief Act and some of the Land Alienation Acts to that effect, the moneylender started overwriting the bonds and underwriting repayments. So, in 1918, the Usurious Loans Act was passed to protect the debtors against hard and unconscionable bargains by authorising the court to reopen, of its own motion, old transactions and to settle the terms equitably. But the Act was soon found wanting as it was to apply only in suits by creditors for the recovery of their dues. A debtor could get the benefit of the Act only by driving the creditor to the court by refusing to repay a loan. This Act, however, was amended in 1926 so as to enable the debtors to have recourse to law for relief. It was found thereafter that even this new Act was limited in its scope as the courts could not give any retrospective effect to its provisions and could reopen accounts only when several conditions were fulfilled.

The Central Banking Enquiry Committee made valuable suggestions for rectifying these defects by adding some new provisions so as to make the new Act really effective. In the post-depression period, nearly every province carried out this recommendation either by further amending the Usurious Loans Act or by including the necessary provisions in other Acts governing moneylending or debt relief. Generally, the new provisions made it incumbent on the courts to reopen past transactions and to award interest at certain prescribed rates. In most of the provinces a distinction was made between secured and unsecured loans, the former having a lower rate of interest, while, in some of the provinces compound interest was forbidden. The following table gives the maximum rates of interest chargeable under the several Acts providing for the regulation of interest :—

	SECURED.		UNSECURED.	
	Simple interest.	Compound interest.	Simple interest.	Compound interest.
Madras	9	Considered "Excessive"	15	Considered "Excessive"
Bombay (Bill)	9	Prohibited	12	Prohibited
Bengal...	15	10	25	10
Punjab	12	9 with yearly rests	18¾	14 with yearly rests
Bihar	9	Prohibited	12	Prohibited
Orissa (Bill)	9	Prohibited	12	Prohibited
Central Provinces	12	5 with yearly rests	18	5 with yearly rests
Assam	12½	Prohibited	18¾	Prohibited
United Provinces	12	Prohibited	24	Prohibited

In the United Provinces, the arrangement is more elastic as it it provided that the Government will notify from time to time the interest rate in consonance with the money market conditions in relation to loans prior to the Agriculturists' Relief Act of 1934, while on loans subsequent to the Act, the rate of interest varies according to the amount of the loan, being lower as the amount is larger.

In most of the provinces (Assam, Bengal, Bihar, C.P., Madras, the Punjab and U.P.) reduction in payment towards accumulated interest has been provided by adopting the rule of *Damdupat*. Under this principle, in Madras, a debtor need not pay anything more towards the debt when he has paid twice the principal of the loan. In several other provinces, the payment of a sum greater than the principal towards the arrears of interest is prohibited.

Registration and Licensing of Moneylenders

As it was found that evasion of law by the moneylender was possible few cases came before the courts, most of the provinces (Central Provinces, the Punjab, Bihar, Bengal, Bombay and U.P.) sought to locate the moneylenders by making registration and licensing compulsory for them. Those moneylenders who did not hold any registration certificate were either debarred from having recourse to courts of law for the recovery of their dues or they were made liable to severe penalties. Yet, the working of this Act, for example, in the Punjab has had some surprising results. Only a small number of moneylenders—9,206 out of about 55,000 in the Province—registered themselves in 1939. This is presumably due to the moneylender's realising the futility of going to court in view of the new agrarian relief legislation. Nevertheless, these provisions for registration and licensing, if effective, would greatly facilitate the growth of organised rural banking and enforcement of rules of business and audit under the supervision of the financing banks. But the definition of the term "moneylender" is not always sufficiently comprehensive to cover all the moneylenders. Moreover, a number of loans (such as loans to traders, small loans on equated payments, kind loans carrying a certain rate of interest) have been excluded from the operation of these Acts. As a result, the sifting of the various kinds of loans for applying the Act to such of them as come under it becomes an extremely complicated task and provides a way of escape for many an ingenious moneylender.

Moratorium

The world depression of 1929 which impoverished most of the cultivators necessitated, in addition to regulating the business of moneylending, some measures of relief to the agriculturist debtors. Being weighed down by a crushing load of debt, it was impossible for them to have even a subsistence income from their lands when agricultural prices had fallen almost to half. The Provincial Governments therefore tried to devise measures of immediate and speedy relief. The earliest means adopted was of granting a moratorium to prevent the rush of suits and wholesale execution of decrees during the period of formulation of debt relief measures.

Early in 1932, the Government of U.P. notified that the execution of decrees in cases in which the civil court had ordered agricultural lands to be sold should be transferred to the Collector who was also authorised to adjourn all sales where the price offered was unfair.

In 1933, this measure was reinforced by another notification laying down the conditions determining the fair price. As a result, about 48,000 decrees were held up while the Debt Relief Act was being discussed. So, in 1934, the Encumbered Estates Act was passed staying suits and proceedings in courts in respect of debts of landholders who had applied to the Collector for a composition of their debts while the Temporary Regulation of Executions provided for staying the execution of proceedings against judgment-debtors and for enabling the debtor to pay off the debt in instalments. With a view to extending this relief to tenants and small holders, another Act was passed in 1937 (to remain in force for six months in the first instance) ; all pending and fresh applications for the execution of decrees as also proceedings were stayed in respect of agriculturists paying a land revenue less than Rs. 1,000 and who were not assessed to income-tax. All agricultural debtors in civil prisons were released and further arrest and detention of agriculturists in execution of decrees were prohibited. Those who paid a land revenue or rent of Rs. 250, however, were required to deposit one-fifth of the amount of the executed decree before getting stay orders.

In Madras, the Government introduced a Moratorium Bill in October, 1937, but replaced it by a Debt Relief Act in March, 1938, which invalidated the proceedings taken by courts between the date of the Moratorium Bill and the passing of the Debt Relief Act. It also provided for revision of the decreed amounts on application of the judgment-debtor. Where sale of land had already taken place, the debtor could re-acquire the land by refunding payment, provided the judgment-debtor applied to the court within 90 days of the commencement of the Act. Any alienation of immoveable property made by a debtor during this period was also declared invalid.

In the Central Provinces, Government issued instructions in 1933 and 1934 that the sale of land should be restricted only to unavoidable cases. Instructions were also issued to the courts that crops and cattle should be attached only after exempting the seed grain, cattle and the produce and fodder necessary for the cultivator and his cattle till the next harvest. In 1938, an Act was passed declaring a moratorium on the lines of the U.P. Act.

In Bombay, the Government passed, in 1938, the Small Holders' Temporary Relief Act enabling the agricultural debtors to secure protection and the tenants their tenancy rights by staying execution of decrees on debtors' properties and by prohibiting eviction by landlords. The Act was to remain in force for one year. Under this Act

only those who held lands not exceeding 6 acres of irrigated or 18 acres of unirrigated land or holders of any kind of land which was assessed at or below Rs. 30 were termed small holders and thus got protection. The staying of proceedings pending or instituted for the sale of land was made conditional on payment of interest on the sum for which the land was to be sold. For the rest, the Act was more or less on the lines of the U. P. Act. Eviction of the tenant was prohibited in cases where he had paid his rent for the year ending 30th June 1938. If the landlord was granted any suspension of land revenue, relief in the same proportion was to be given to the tenant in respect of his payment of rent and interest.

In the remaining provinces, the Debt Relief Acts provided for staying proceedings in suits and decrees on the application by the debtors for conciliation of debts and thus indirectly granted a moratorium in respect of their loans. The moratorium thereafter varied with the length of time taken by the conciliation boards to settle the debts.

Conciliation of Debts

With a view to bringing about amicable settlement of debts, Conciliation Acts were passed in the C.P. (1933), the Punjab (1934), Assam (1935), Bengal, Madras (1936) and in some of the Indian States. Under these Acts, Conciliation Boards came to be set up for adjusting the available assets of the debtors to the total debts and facilitating repayment in a reasonable number of instalments. Such a reduction in debt was permitted only when creditors to whom 40 per cent. (in the case of Madras and Sind, 50 per cent.) of the debts were owed agreed to an amicable settlement. Creditors who refused to agree to the Board's decision were placed under certain disabilities in recovering their dues (e.g., disallowance of costs of suit and simple interest in excess of 6 per cent.) while the claims of those who accepted it were given priority. The jurisdiction of the Boards was generally one or two taluqs. Facilities were granted to the creditors to realise the instalment amounts through the Revenue Officers so as to induce them to join in an agreement. In Bengal, the awards were made negotiable by providing that the right to receive any amount payable under an award could be assigned in the manner prescribed in the Act.*

The working of these Boards has brought considerable relief to the cultivators. In the Punjab, during the year ending 31st Decem-

* *Cf.* Sivaswamy, K. G., : "Legislative Protection and Relief of Agriculturist Debtors in India", p. 266.

ber 1940, the Conciliation Boards disposed of nearly 26,000 applications involving Rs. 2,46 lakhs ; the debts which were actually admitted amounted to Rs. 91.45 lakhs of which the debtors agreed to pay Rs. 35.85 lakhs. Debts admitted on creditors' application only amounted to Rs. 14.42 lakhs of which the debtors agreed to pay Rs. 4.19 lakhs. In Madras, a total of Rs. 508 lakhs was reduced to Rs. 265 lakhs during the 28 months ending June, 1940. In Bengal, during 1937-38, debts amounting to about Rs. 5 crores were scaled down all over the Province. But, compared to the existing mass of debts, the work done so far does not appear to have gone far enough. For this, some defects in the working of the Boards are responsible.

The exclusion of certain classes of debts under these Acts has restricted the scope of benefit. Thus, for example, rent debts, co-operative debts, debts due to banks, trade debts and debts due to Government are partially or totally excluded from many of the Acts, or they are included in the Act subject to certain difficult conditions. The inability of the illiterate debtor to give the names of some of his creditors makes conciliation of many debts difficult since it would be unfair to cancel the debts of creditors to whom no notice has been served. Fraudulent practices such as false transfers and bogus mortgage deeds hamper settlement of debts but many of the Conciliation Acts, do not empower the Boards to dismiss such applications. In most of the Acts, there is no provision to settle the debts of an individual debtor in case of joint debts unless all the debtors apply. As a result, applications from debtors who are a party to joint debts have failed to receive consideration from the Boards. Where the Board tries to decide the validity of disputed debts, its labour is wasted because its decision is not made binding. Applicants are also rejected by the Board for reasons such as extreme attachment of the debtor to his land and his unwillingness to come to a settlement with his creditors when it involves transfer of land ; unwillingness of creditors to conciliate debts due to them where they hold decrees of foreclosure or lands under interminable usufructuary mortgage ; over-indebtedness of the debtors ; debtors owing heavy arrears of rent or revenue ; debts supported by defective documents, etc. Corruption and inefficiency of the Boards have also been detected in some cases. It is thus reported of Bengal that these Boards consisted mostly of persons whose literary attainments went little beyond ability to sign their names. It is too much to expect such members to solve " intricate questions of law . . . that often tax the intelligence and baffle the

judgment of experienced judges and lawyers.''* Lack of a sufficiently large number of Boards has often, as in Bengal, led to a sudden increase in proceedings against debtors in those areas where the Boards were not instituted. As a result of all this, the scope of conciliation has been limited. The following results of a Conciliation Board's activities in two Taluqs in the C. P. during 1937 show the limited extent to which debts could be composed by the tribunal.†

Percentage of total agriculturists.	Remarks.
20	Have hardly any debts to be repaid.
20	Debts below Rs. 25; mostly nominal agriculturists and labourers who also would not apply.
40	So much in the clutches of the moneylenders or in need of future credit from them that they dared not apply for reduction in their debts.
20	Applied. These were moderately indebted and confident of future credit or were so heavily indebted that they could not hope for future credit in any case. Half of them got relief and the other half had their applications rejected for various reasons.

Compulsory Scaling Down of Debts

The scope of amicable settlement being limited, relief was further sought to be given to the agriculturists through compulsory reduction in the claims of the creditors. Madras was the first Province to give such ready relief to debtors by passing the Madras Debt Relief Act of 1938. Firstly, it prohibited the creditor from recovering in the aggregate more than twice the original loan; where repayments were less than twice the sum borrowed, only the balance was to be paid. All arrears of interest outstanding on 1st October, 1937, on debts incurred before the 1st October, 1932, were cancelled and only the principal was deemed payable. Interest on debts incurred on or after the 1st October, 1932 could not exceed 5 per cent. till the 31st October, 1937 whereas interest on all decrees from the latter date was laid down at 6¼ per cent. Tenants were also given relief by wiping out all arrears of rent except those of the two years preceding the Act provided these latter were paid by September, 1939. Sales of movable or immovable property could be set aside if made in execution of a decree after the 1st October 1937. The Act conferred considerable benefits on the agriculturists in as much as

* See Sivaswamy, K. G., *op. cit.*, p. 302.
† See Sivaswamy, K. G. *op. cit.*, p. 280.

by September 1941 more than 168,000 cases had been disposed of involving Rs. 6.52 crores of debts which were reduced to Rs. 3.46 lakhs. In the C. P. and Berar the Debt Relief Act passed in 1939 replaced Debt Conciliation Boards by debt relief courts which were authorised to give graded relief to the debtors in respect of their dues, on the basis of fall in prices since the depression. The principal of debts prior to 31st December 1925 was to be reduced by 30 per cent., of those incurred between that date and 31st December 1929 by 20 per cent. while those between the last date and 31st December 1931 by 15 per cent. Debts incurred subsequently were not provided relief. The payment of interest could not exceed 6 per cent. simple interest on secured and 9 per cent. on unsecured loans while the payment of compound interest was limited to 4½ per cent. with yearly rests.

The U. P. Agriculturists Debt Relief Act of 1939 laid down that loans taken before the Act came into force should carry a certain scheduled rate of interest from 1st January 1930 till such date as might be fixed by the local Government. Any judgment-debtor whose decree was not executed could apply for revision. The excess paid under interest was to be credited to the principal. Interest on subsequent decrees was not to exceed the rate at which the local Government borrowed. The Act authorised the courts to award by way of the principal amount due, a sum which would not exceed twice the amount of the principal minus all the payments received by the creditor in the past in respect of the said transactions. The landed property of protected tenants could not be sold away to realise their dues but creditors could take possession of it as a usufructuary mortgage.

The Bombay Agricultural Debtors' Relief Act, 1939, was put into force in 1941 as an experimental measure in a few talukas in the three divisions of the Province.* It provides that every debt in respect of which no application for settlement is made within one year from the date on which a Board is established would be deemed to have been duly discharged. The specially constituted Debt Adjustment Boards working under the control of the civil courts are authorised to compel the creditors to accept scaled down debts. They also settle the subsequent arrangements for the repayment of the adjusted amount in instalments convenient to the debtor. As in the U.P. and Berar, the Act makes provision for graded relief as follows :—

* Recently, a Committee has been appointed to review the working of the Act and to make recommendations on the possibilities of its extension to other districts.

Particulars of Debt.	Rate at which interest will be calculated.	Percentage of reduction in principal and interest.
Incurred before 1-1-1931.	12 per cent. or agreed rate whichever is lower.	40
Incurred between 1-1-1930 and 31-12-1930.	12 per cent. or agreed rate whichever is lower upto 1-1-1931; interest on the adjusted amount upto the date of the application not to exceed 9 per cent.	30
Incurred after 1-1-1931.	9 per cent. or agreed rate whichever is lower.	Accumulated interest cannot be debited to the principal account; amount of interest due not allowed to exceed the amount of principal outstanding.

The account regarding the principal was to be separate from that of interest, accumulated interest not being allowed to be debited to the account of the principal. The rule of *Damdupat* was also adopted for reducing the debt. A procedure was laid down for the Boards to estimate the debtor's ability to repay his dues and the principal could be scaled down to 80 per cent. of this repaying capacity. Where creditors agreed to scale down the total claims to 50 per cent. of the assets of the debtor, they could be paid down the amounts in the form of bonds issued to them by the Provincial Land Mortgage Bank. Otherwise, they could recover the scaled down debts in instalments not exceeding 25 in number. Where the assets of a debtor were found inadequate for repayment, the Board could declare him an insolvent.

In general the element of compulsion has not always proved to be a better alternative to amicable settlement. For instance, while the reduction provided by the Debt Relief Act in the C.P. varied between 10 and 30 per cent. the average remission secured by the Debt Conciliation Act, according to the Government review on the working of the Boards in 1937, was 54 per cent. of the demand, the highest being as much as 64 per cent. in some individual cases.

Miscellaneous Measures

In addition to debt relief, attention is given to the necessity of exempting a portion of the debtor's property from attachment and sale, and the protection of the debtor from intimidation and molestation by the creditor for the recovery of his dues. One aspect of this problem of indebtedness, however, that remains to be urgently tackled is that of insolvent agricultural debtors. Where ancestral debts have been for years disabling the farmer even from profitably continuing his occupation, debt conciliation is an inadequate relief. While in

Europe restrictions are placed on the recovery of ancestral debts to the extent of the property inherited, there is no corresponding measure passed in India for the relief of the debtors. To such cultivators, who are beyond any hope of being rehabilitated, insolvency provisions are the only remedy. The case for a simple Insolvency Act for such farmers has found support from several Commissions and Committees in the past—including the Royal Commission on Agriculture, the Civil Justice Committee and the Indian Central Banking Enquiry Committee. As the Royal Commission on Agriculture pointed out : " Just as creditors have the right to insist that all the debtors' assets should be impounded and applied towards the payment of the debts, so also the debtor who has given up all his assets should have the clear right to be allowed to earn his living if he can and to be free to make a new start in life."* In this connection, the investigation of the Bengal Board of Economic Enquiry (1935) into the position of tenants with special reference to their indebtedness is illuminating. It showed that of the 635 families examined, 13 per cent. of the debtors, were indebted to the extent of more than 4 times their annual income while others whose holdings were below 2 acres were 20 per cent. of the total debtors. Thus, on the whole, about 33 per cent. of the total number of tenants were not in a position to get out of their indebtedness and, therefore, could save themselves only by resorting to insolvency provisions.

But as the Insolvency Act of 1920 is intended only for debtors whose debts amount to more than Rs. 500 and as the courts also generally disallow the benefit of the Act to landholders whose rights are protected from sale in execution, it is not very helpful to cultivators. The Royal Commission on Agriculture had, therefore, recommended amendment of the Insolvency Act enabling the debtors whose debts were less than Rs. 500 to have recourse to this Act. This recommendation has been given effect to by the Governments of the C.P. and Berar and the Punjab. In Bengal, insolvency provisions have been embodied in the Agricultural Debtors' Act of 1936. In other Provinces which have not adopted similar provisions, the creditors fail to get expeditiously the maximum repayments possible while the debtors, weighed down by past debts, are unable to make a new start in life. A simple rural Insolvency Act enabling the debtor to surrender all his assets to the creditors excepting a subsistence holding to earn his living would meet the situation, if, indeed, the debtor had

* Report, p. 441.

a subsistence holding to start with. There is no reason to fear that such a provision would bring in a wholesale resort to insolvency. In fact, experience in C.P. and Berar shows that these provisions have been followed by a reduction in the number of insolvency petitions from 1,766 in 1936 to 1,070 in 1937, the latter being only a little more than one-fourth of that for 1930. Unless such help is given to the large number of hopelessly insolvent debtors in rural areas, the other alternative is, as the Royal Commission observed, " to witness a continuation of a system under which innumerable people are born in debt, live in debt and die in debt, passing on their burden to those that follow."

LIMITATIONS OF DEBT LEGISLATION

It now remains to consider whether all these laws have adequately solved the problem of indebtedness. The immediate effect of these measures has been a contraction of credit which was partly due also to the economic depression which affected the moneylending profession (by freezing the assets of those who are both agriculturists and moneylenders). The fact, however, remains that " in areas where such legislation is in force, it is said that the moneylenders have discontinued lending excepting to old and trusted clients and have restricted their loans to a minimum."* In most of the provinces, the main drawback of these relief measures has been that the State has not come to the help of the farmer in repaying his dues to the creditor. It is mainly for this reason that many debtors have become defaulters even in respect of their scaled down debts, while in some Provinces such as Sind and the Punjab, many a cultivator has refused to repay his debts to co-operative societies and the *taccavi* dues to Government. While it is not denied that some defaults, so far as they are wilful, reflect the demoralising effects of the agrarian relief legislation, it is equally true that the major cause of default is the debtor's inability to pay. Yet, ethical principles demand that debtors should be made to repay all legitimate dues to the fullest extent that they can be paid as, otherwise, demoralisation would creep in in all their transactions. The proper remedy, therefore, is to enable the debtor to repay the debt with assistance from the Government. The Government in Bhavnagar State, for example, has set an example of what the State could do in this direction. Here, the Government based its scheme of debt redemption on the principle that the maximum annual repayable by an agriculturist debtor should not exceed three times the annual assess-

* Statutory Report of the Agricultural Credit Department, Reserve Bank of India, para. 11.

ment payable by him. The State, thereafter, undertook to help the debtors to repay their dues. The total amount to be advanced by the State for this purpose in respect of each village, however, was not to exceed one-fourth of the nominal arrears outstanding in the books of accounts of the moneylender. This advance was recovered from the agriculturist at 4 per cent. per annum along with the annual assessment. Between 1930 and 1934, debts amounting to Rs. 86.4 lakhs were scaled down to Rs. 20.6 lakhs in this way. To save them from again falling into debt, the Government have undertaken several constructive measures to improve the economic conditions of the farmers. They have also been granted liberal remissions of arrears of land revenue.

Again, it is obvious that in this variety of measures differing from province to province, there are sound provisions as well as defects. Each province, by now, must have sufficiently tried its laws and found in what respects they are wanting. It would therefore be desirable to examine the working of the Acts in the light of experience gained and to frame new uniform laws for all provinces embodying in each of the Acts the most useful provisions in all similar Acts elsewhere, except for those details which have to differ to meet local conditions and requirements.

The main criticism that can be levelled against these laws is that they are inadequate in themselves to tackle the evil of indebtedness. They are at best corrective and not preventive. The moneylender's dealings may be regulated, debts may be conciliated or scaled down but they are bound to reappear so long as the occupation of farming itself cannot give the cultivator sufficient means to subsist. With the help of these measures the farmer may cover part of his lost ground but he cannot hold it for long, unless efforts are simultaneously made to rehabilitate agriculture and to transform it from a deficit to a profitable basis, through comprehensive agricultural reforms.*

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* In his speech before the General Policy Committee (Post-War Reconstruction) on January, 17, 1944, Sir J. P. Srivastava said : "It should be realised that the end of the war will probably mark for the first time in the history of India the extinction of, or at least a very large reduction in, agricultural debt." It is difficult to say what exactly has been the effect of the present high prices on rural debts, but, *prima facie*, it would appear that it is mainly the bigger landholders who have benefited by the rise in prices, and probably they may have paid off a large part of their debts. The mass of the peasantry has suffered as a result of inflation. The acute distress prevailing in several parts of the country does not warrant an optimistic statement such as the one above. In any case, it is a matter that deserves to be investigated closely. We learn that the Reserve Bank has already taken such an enquiry in hand. The enquiry should give valuable results. To the extent to which there has been an improvement in the debt position, care will have to be taken to see that the gains made now are not lost once again in the post-war period.

CHAPTER XIII

RURAL RECONSTRUCTION ACTIVITIES OFFICIAL AND NON-OFFICIAL

1. Official Activities

As a result of the recommendations of several commissions and committees appointed in the latter half of the nineteenth century various measures have been taken for the amelioration of the rural population such as passing of the Agriculturists' Loans Act and the Land Improvement Loans Act, the organisation of the co-operative movement, the establishment of Research Institutes and Colleges for agriculture, the organisation of Agricultural Departments for researches in agriculture and for extension of the results thereof to the farmers. The scope of various departments such as Veterinary, Forest, Irrigation, Co-operation, Public Health, Education and Industries has been widened in order to increase their utility to the rural population. Legislation for the protection of agricultural debtors as well as tenants has been enacted. However, the results achieved on account of these measures have been, as has been shown above, inadequate to meet the situation.

The Provincial Governments under the Reforms of 1919 realised the futility of haphazard attempts for rehabilitating the villages and drew up plans for taking concerted action in that direction. However, they felt handicapped in carrying out their plans for want of finance. Under dyarchy the nation-building departments were under popular ministers but the finances were controlled by permanent services and much progress could not be achieved. Their work, however, received a stimulus by the announcement in 1935 of special grants by the Central Government to the extent of rupees one crore (to which another grant of Rs. 1.03 crores was added subsequently) for assisting the Provincial Governments in carrying out approved plans for the betterment of villages. The statement opposite shows the allocations from this grant for the various items and the amount expended therefrom by the Provinces. The introduction of provincial autonomy and assumption of office by the popular ministries in 1937 added fresh vigour to the efforts that were being made in that direction. Definite plans were drawn up in the provinces for carrying out the work of rural reconstruction to be financed out of the Government of India grant as well by contributions from the provincial exchequers. Some of the progressive Indian States too had their own plans drawn up for carrying out rural reconstruction activities.

Statement showing the amount allotted and expenditure incurred on different items of Government of India Grant upto the end of the year 1940-1941.

(In Lakhs of Rupees).

	Items.	Allotment from the Government of India grant.	Expenditure upto 31st March 1941.
1.	Village Improvement Scheme through Co-operative Department and District Offices	8.29	7.90
2.	Rural Water Supply	44.65	39.36
3.	Rural Communications	23.82	19.31
4.	Rural Sanitation	5.70	5.47
5.	Rural Health	11.72	11.21
6.	Industrial Schemes	3.45	2.96
7.	Agricultural Improvement	9.24	8.87
8.	Establishment	2.08	2.08
9.	Consolidation of Holdings	4.11	4.11
10.	Debt Conciliation	1.00	1.00
11.	Improvement of Livestock	4.60	4.95
12.	Veterinary	.93	.91
13.	Improvement of Poultry	.11	.11
14.	Propaganda	6.67	6.67
15.	Welfare Schemes	5.82	4.36
16.	Miscellaneous	4.26	3.51
17.	Discretionary Grants	6.85	7.03
18.	Unallotted Reserve	4.66	......
	Total ...	147.96	129.81

In all the Provinces and States where rural reconstruction plans were drawn up co-ordination among various nation-building departments was aimed at and with this end in view either a special minister was appointed or departments and boards were organised. Co-operative organisations such as better living societies, taluka development associations, better farming societies, rural development societies and village *panchayats* are being used for carrying out the work. Considerable changes have been made in the method of approach to the subject and attempts have been made to concentrate activities so that definite results may be achieved. Due to the resignation of popular ministries in several provinces and the pre-occupation of Government with war work, enthusiasm in the work has waned to a marked extent in several provinces—except, of course, for the " grow more food " campaign which aims at raising the yield from land to meet the increased demand due to the war. A brief review of the nature of the organisations set up in various provinces and some of the important States to deal with rural problems on a comprehensive scale is given below.

Bihar.—The work of rural reconstruction in Bihar was taken up in 1938 with the establishment of the Rural Development Department. Four model centres, one in each division, were started. Each of these centres comprises a group of 20 to 30 villages in which in-

tensive rural development work is carried out. Each centre is in charge of a trained district inspector. The development work includes encouragement to small-scale industries such as spinning and oil pressing, construction of roads, distribution of medicine, village sanitation and constitution of village *panchayats*. At all the centres night schools for adults are started. An institute started in 1939 trains village-organisers who after receiving training at model centres are to take up the work at new centres to be subsequently opened in the districts. A Provincial Rural Development Advisory Board with heads of all nation-building departments as its members has been constituted in order to bring about closer co-operation among several departments of Government in carrying out the work.

Bombay.—An ambitious programme of rural reconstruction was drawn up by the Government in this Province and a Rural Reconstruction Department was created to put it into operation. Initially, this new Department was combined with the Co-operative Department and the field-staff of the latter was transferred to the combined Co-operative and Rural Development Department. Subsequently, the two departments were separated again, and the rural development staff was partly placed under the control of the District Collector and partly distributed among the Agricultural and Co-operative Departments for doing propaganda work. To help the Department with guidance and advice, a Provincial Board of Rural Development was constituted consisting of the Registrar of Co-operative Societies, the Director of Industries and a few non-officials nominated by Government with the Minister in charge of Rural Development and Agriculture as the Chairman. To facilitate the work of the Board, four Committees were appointed, viz. (i) Agricultural and Livestock Committee, (ii) Cottage Industries Committee, (iii) Training and Propaganda Committee, and (iv) Backward Areas Committee. Further to carry on the work of the Department, District Rural Development Boards were constituted with special officers to help them. Before the above scheme could fructify, the popular ministry which was the driving force behind the scheme resigned. The main agencies for the development work are the Taluka Development Associations which are now extended to most of the talukas of the Province.* Better Farming Societies and other co-operative agencies. The work mainly comprises distribution of better seeds and implements at concessional rates, improvements in the breeds of cattle, extension of dry farming

* Mr. D. A. Shah has kindly given us an instructive note on the working of the "Taluka Development Associations in Bombay" which is reproduced as Appendix to this chapter.

methods, development of cottage industries and bringing about improvement in village sanitation, medical aid and water supply, and care of the backward areas and tribes.

Sind.—In Sind, rural reconstruction organisation was set up in 1937 under a Special Officer. District Sudhar Committees were appointed to carry out village uplift work. However, the uplift work at present is confined to supply of pure seed and better implements to the farmers for which a number of depots have been established in the province.

Bengal.—A separate Department of Rural Development was created in Bengal under the charge of a Director of Rural Reconstruction. The main activities of the department are (i) introduction of better methods of cultivation, (ii) improving the living conditions of the rural population, (iii) raising the standard of diet of the villages, (iv) provision of better facilities for amusement and recreation, and (v) encouragement to cottage industries. The work is being carried out through the Union Boards, Village Uplift Societies and Better Living Societies. The work mainly consists of cutting of jungles, repairing of village roads and construction of drains, distribution of quinine in the malaria stricken areas, cleaning of water hyacinth, re-excavation of " Khal " in order to bring more area under cultivation, distribution of seed and sinking of tube wells.

United Provinces.—The Congress Government in U.P. decided to carry out the work of rural reconstruction in a comprehensive manner and appointed a Special Officer for that purpose. A Provincial Rural Development Board was established with the heads of all nation-building departments as its members. District Rural Development Associations were organised in order to carry out the programme. In districts, rural reconstruction units were organised for groups of some 15 villages. During the year 1940-41, there were 795 units comprising of 15 villages each, in which the Rural Development Scheme was in operation. The work is being carried out through the agency of better living societies, better farming societies and village *panchayats*. Much has also been done in connection with distribution of better seeds and implements, improvement of the breed of cattle, development of cottage industries, village sanitation and health, and education. Village water supply and communications were improved and panchayatghars were built up in several villages. The distinctive feature of rural reconstruction activities in the United Provinces is the training of women workers at the Fyzabad Women's

Welfare Training Camp. During the year 1940-41, two batches of about 55 village women each were trained in a course of six months' instructions in girl guiding, welfare work, handicrafts, care of children and the like. Women teachers were selected and deputed by all the districts of the Province to this training camp. After training, they went back to their villages to organise welfare work among the village women and to instruct them in the arts they themselves had learnt. In Fyzābad District, 35 trained women have been organising welfare work in the villages for well over a year and they are reported to be doing very satisfactory work in improving home life. Four hundred and twenty village women in that district are attending the centres and are gradually being made literate and are receiving instruction in sewing, embroidery and soap-making. The training of the women workers in village welfare activities is an experiment which should be watched with interest. In all rural reconstruction activities, women yet do not find a place except in an indirect way.

Assam.—Though a very comprehensive programme has been drawn up for the rural reconstruction work in the province nothing substantial seems to have been achieved so far. Some work in connection with village sanitation, adult education, medical relief, etc., is being done.

Madras.—In Madras, the District Boards are constituted under the Madras Local Boards Act to look after rural reconstruction activities. The actual work is being carried out through the agency of village panchayats. The development activities mainly consist of improvement of sanitation, communications and water supply. The scheme of subsidised rural dispensaries is an important feature of rural reconstruction work here. At the end of 1940, there were 524 dispensaries of which 89 were maintained entirely by local boards, and 455 subsidised by Government. Mention may also be made here of distribution of better seeds and implements and construction of godowns in villages.

Central Provinces and Berar.—A Village Uplift Board for the whole Province and village uplift committees for the districts have been organised. The village uplift committees have done some work in connection with adult education and distribution of seeds and manure. Promotion of village industries, use of oil *ghanis,* carrying out of the programme of sanitation and adult education were some of the important features of the work done under the Wardha village uplift scheme.

Punjab.—In the Punjab rural reconstruction work is now transferred to the Co-operatve Department and a special Assistant Registrar has been put in charge of it. The work is being carried out through the better living societies and includes improvement of sanitation, provision for amusement and recreation, cattle breeding, better farming, etc.

In order to develop these nation-building activities considerable sums have been found by the Provincial Governments to accelerate their programme.

Cochin.—In Cochin, a beginning has been made by opening a rural development centre at Cherpu near Trichur. The programme of work is comprehensive and consists of development of bee-keeping and poultry, distribution of seeds, improvement of sanitation, provision of water supply, removal of illiteracy and starting of co-operative societies for weavers, artisans and labourers. The rural reconstruction work has evoked considerable popular interest and rural development societies are organised in several villages.

Kashmir.—A Rural Development Department has been set up in Kashmir with a view to ameliorating the conditions of the villages and to improve the village life generally. The department undertakes an economic survey of the villages and adopts suitable measures to bring about improvement. A number of villages have been surveyed and much useful information collected. The rural reconstruction work covers a wide range of activities including provision of adequate water supply, laying out parks, construction of village roads, revival of cottage industries and provision for adult education. Much useful work is done in promoting village hygiene.

Mysore.—With a view to enlarge the functions of the village *panchayats,* and to concentrate and co-ordinate the efforts of the several departments in villages, Government have sanctioned a scheme for organising concentrated propaganda in some selected villages in each district. It was the intention of Government that such villages might eventually serve as examples of good *panchayat* administration which less advanced *panchayats* might be induced to follow. To begin with, the scheme was put into operation in June 1936 in 182 villages—two or three villages being selected in each taluk. The number of such villages thereafter increased to 273. In order to increase the pace of the rural reconstruction drive, Government have proposed to introduce concentrated propaganda into entire *hobli* of each taluk during the first year and to extend the scheme into other

hoblis at the rate of one *hobli* each year. In this manner, the scheme would have come into operation in all the villages in the State at the end of five years. The distinct advantage in selecting one entire *hobli* consisting of about forty to fifty villages as a unit for concentrated propaganda instead of one or two villages scattered in a taluk would be that all the available resources of the several departments could be pooled together with advantage and consolidated efforts put forth for fulfilling the primary needs of the *hobli* in the matter of sanitation, drinking water, inter-communication, etc., within a definite period. With a further desire to associate more non-official initiative and direction in the scheme of rural welfare work of the several departments, it is proposed to utilise the services of honorary workers who could reside in the *hoblis* and assist in creating a live interest in the villages and in co-ordinating the work of several departments. The workers are to be paid an honorarium of Rs. 30 per month. A detailed and comprehensive list of the problems that a *hobli* worker has to deal has been prepared. The finances required for carrying out the work are to be provided from village panchayat funds and government grants. Appreciable results in different directions were achieved in villages where this scheme was in operation but the expectations of Government that the rural welfare work attempted in the model villages would be readily followed by other villages did not fully materialise.

Baroda.—The rural reconstruction work in Baroda is carried out by various State Departments such as the Departments of Agriculture, Co-operation, Public Health, Public Works and Industries and by Village Panchayat. The main feature of the work is the creation of rural reconstruction centres on the model of the Martandum Centre working under the guidance of Dr. Spencer Hatch. These centres have proved to be a useful agency for spreading agricultural knowledge. There are two such centres, one at Kosamba, and the other at Karjan, the latter being of recent origin.

The object of the rural reconstruction centre at Kosamba is to create interest in the rural population in the necessity of improving their present condition. It deals with all aspects of village life and aims at training up village leaders. The economic programme includes improvements in agriculture, horticulture and livestock, promotion of cottage industries and poultry keeping and kitchen gardening. Educational work is also emphasised. The centre conducts every year a summer school for cottage industries and a summer course in rural

reconstruction. Village sanitation and medical relief are also looked after by the centre. The Public Health Department is responsible for rural medical relief while the Public Works Department undertakes such useful activities as digging tube wells, repairing tanks, irrigation schemes, etc. The Co-operative Department helps the formation of Taluka and Village Development Associations while the Industries Department encourages cottage industries. The village credit societies are turned into multi-purpose ones with the idea that each society should be a small rural centre and should conduct all the uplift activities in that village in some form or another. Since the inauguration of the scheme, every centre village has a co-operative society of one kind or the other. At the close of 1941, there were in the area served by the Kosamba Centre 35 village credit societies and fourteen non-credit societies inclusive of 8 cotton sales societies, 6 thrift societies for women, 1 housing society, 2 co-operative stores and 1 taluka development association. The State has prepared a comprehensive scheme for the construction of feeder roads and the supply of drinking water to all villages and it is being carried out systematically and is nearing completion. The statutory village panchayats and the system of compulsory education are materially contributing to the moral and material progress of rural population. The late Maharaja Sayaji Rao had donated a fund of Rs. 1 crore for this purpose and recently the present ruler has donated another crore for beneficent work to help the general development of the State.

Hyderabad (*Deccan*).—In the Hyderabad State, a scheme for the rehabilitation of rural areas was sanctioned in 1937-38. A Central Rural Reconstruction Board was constituted with heads of all nation-building departments as members. Boards for districts as well as talukas have also been established. A village in each taluka has been selected for intensive treatment with a co-operative rural reconstruction society of its own. Some work has been done in connection with improved farming and animal husbandry, organised sale and purchase of farm produce and promotion of self-help and thrift.

Conclusion

It is evident from the above survey of rural reconstruction activities that though each Province and State has taken steps in this direction, nowhere does the programme appear to be sufficiently comprehensive. The principal drawback of all these schemes, however, is that they are not preceded by any studies of the economic and other problems of the area which they seek to benefit. A section for rural

economic research in each Province and State, therefore, would greatly facilitate formulating as well as execution of such plans. Again, though it is true that these schemes have not been in operation long enough to yield substantial results, unless the fundamental issues bearing on rural welfare such as land reclamation, adequate irrigational facilities, planned consolidation of holdings, a rational system of land tenure and tenancy, an equitable basis for land assessment, etc., are tackled, nothing appreciable would be achieved by the reconstruction work of the type which is conducted at present. For, "rehabilitation" implies not mere giving a few amenities of life to the villages but a simultaneous attack on the evils that have been for years at the very root of rural degeneration.

II. Non-Official Agencies

(I) Mahatma Gandhi's Contribution to Rural Reconstruction*

It can truly be said that Mahatma Gandhi started as a politician and has ended up as an economic, social and religious reformer. It was he who saw more clearly than any Indian leader before him that if Swaraj or Self-Government was to mean anything for the dumb millions of this country, the national movement must touch all aspects of the villager's life. He also saw that attempts at economic amelioration could not wait until after Swaraj was won, and so, as an immediate step, he developed his scheme for the revival of the *charka* and the encouragement of *swadeshi*. It would take us too far from our present objective to trace the philosophical roots of his teachings. In the early stages, he was put down as a reactionary, his ideas were dubbed as mediaeval and even antediluvian. But, gradually, he built up institutions to foster his ideas and give them concrete shape.

The All-India Spinners' Association

In 1921 the Indian National Congress gave the *charka* a central place in its programme of economic uplift, and in 1923 was formed the All-India Spinners' Association to finance and direct the production and sale of *khaddar* through its various production centres and sales depots.

The main achievement of the A.I.S.A. has been the employment that it has been able to provide for large numbers of the rural population in their own natural surroundings. According to the Annual Report of the Association for the year 1941-42, the total number of

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* We are indebted to Mr. V. L. Mehta for a note on this subject. The following paragraphs are based on his note.

artisans served was 3,54,257 distributed over 15,110 villages. The wages disbursed to these artisans, during the 18 months ending 30th June 1942, amounted to Rs. 80,00,000 in round figures. These wages represented nearly two-thirds of the cost of khadi produced during the period which was valued at Rs. 1,20,02,430. The sales of khadi amounted to Rs. 1,49,84,513. During the entire period of 17 years since the Association started work, the aggregate production amounted to Rs. 6,83,57,862, out of which a sum of Rs. 4,10,30,631 represented the amount of wages disbursed. It has to be pointed out that this organisation has been built up with capital that is insignificant in comparison with the huge resources of the large scale industry, the total amount available at the close of the year 1941-42 being only Rs. 50 lakhs as compared with the sum of nearly Rs. 50 crores invested in the textile mills. Through the Association employment is found, however, for over half the number engaged in the mill industry.

In the programme of work of the A.I.S.A. the main aim of making villages self-sufficient is all the time kept in the forefront, the objective being to have one or more spinning wheels in each home and one or more handlooms in each village. Systematic instruction in all the processes, particularly the preliminary ones, engages the special attention of the local workers of the Association and experiments and researches are in progress to simplify and to improve these processes and tools. In the matter of ginning the cotton, preparing carded slivers, increasing the strength and uniformity of the yarn or warping, the tools and processes have undergone almost revolutionary changes during the last 17 years. As the production of khadi on a commercial scale is also part of the programme of the Association, there is all the while an attempt made to reduce costs and to increase output and simultaneously to bring about a rise in the return to the producer. Since 1935, definite efforts have been made with considerable success to raise the wages of spinners to somewhere near the level of a living wage and recently minimum wage rates have been fixed for carding and weaving as well.

We need not discuss the question here whether Gandhiji is against the introduction of all machinery or whether the *charka* is anything more than a stop-gap, a mere transitional device to be adopted in the absence of anything better. For Gandhiji, the question has extra-economic considerations. Ultimately, his economic philosophy springs from a certain view of the end of good life as he conceives it. Even from the narrow economic point of view, however, the

charka movement has rightly led to a change of emphasis from large-scale industrialisation and urbanisation to the need for fostering small-scale industries in rural areas so as to improve the conditions of life for the villager. We cannot multiply Bombays and Calcuttas all over the country. We must find employment for the rural masses in the villages, employment which will involve the harnessing of all the human labour that has been running to waste so far on account of the seasonal character of agriculture and the absence of suitable subsidiary or full-time rural industries. There is little doubt, that hand-spinning offers itself as once of the most suitable village industries for this purpose, apart from the value of *khaddar* as " the livery of our freedom," and its levelling effect as between the rich and the poor.

The A. I. V. I. A.

The revival of khadi is, for Gandhiji, only a part of a nation-wide campaign for village reconstruction, a campaign for teaching the villager self-help, self-respect, the dignity of labour and, above all, the value of a simple and honest life. The *charka* is the sun round which all other village arts and crafts revolve. Hence, it is necessary that all the accessories of hand-spinning should be obtained from the village and all the processes pertaining to the same should also be undertaken in the village, so as to create new employment there. But, further, village industries other than spinning should also be fostered, due care being taken to see that these are adapted to local conditions in each area. With this end in view, the Indian National Congress at its session held in Bombay in October 1934, adopted a resolution approving of the formation of a body called the All India Village Industries Association for the revival and encouragement of various dead and dying industries of the country, besides the central industry of hand-spinning and for promoting the reconstruction and reorganisation of village life.

In drawing up its immediate programme, the A.I.V.I.A., under Gandhiji's guidance, fixed its attention on industries that affected the daily life of large masses of the population and linked up its activities with a drive for improvement of the diet of the people. To cite an illustration, the Association called upon its members and agents and through them the general public to use hand-pounded rice in place of milled rice and hand-ground whole grain flour instead of the flour turned out by mills. The use of these articles is recommended by the Association both because it gives encouragement to a cottage industry or a subsidiary occupation that adds to the income of the

agriculturists' families and also because of the recognised nutritive value of hand-processed food-stuffs. This part of the programme of the Association is based on the results of scientific researches into problems of nutrition carried on by nutrition experts in India and abroad. May we say it is a significant tribute to Gandhiji's work in this field that recently, in view of the general shortage of rice and wheat, the Governments of various Provinces and States have prescribed the use of undermilled, if not unpolished, rice and of whole wheatmeal flour instead of the highly refined variety produced by flour mills.

The A.I.V.I.A. aims at utilising the local raw materials and to work them up into manufactured articles locally with the aid of local talent and labour. To implement this desire, the encouragement of these industries by the Association has necessarily led to an examination of the comparative efficiency of different processes and the possibilities of reduction in cost of production. Investigation and research have enabled the Association to place before the public improved grinding *chakkis* and hullers to facilitate the production of flour and hand-pounded rice for households. Particularly valuable has been the research carried out in the field of oil-pressing where improvements have been effected on the bullock-driven *ghani* such as add to the working efficiency and reduce the strain on the animal. In place of sugar the Association recommends the use of *gur* (jaggery) and an attempt has been made by the Association to increase the production of *gur* from the sweet unfermented juice of different varieties of palm trees by the establishment of research and demonstration stations conducted for some years in the province of Bombay and in the Central Provinces and Berar.

Among the other industries to which the Association has devoted its attention may be mentioned soap-making from indigenous materials, bee-keeping, tanning and leather work, and paper-making. Of these, paper-making as a cotttage industry has received considerable stimulus in consequence of the increased demand for hand-made paper from those connected with the Association and with the Congress. In the wake of the increased demand have come attempts to increase and improve production. Experiments and investigations to this end have been carried on at Wardha and later, with the aid of subventions from provincial Governments, in certain provinces as well. With the outbreak of the war and the consequent reduction of supplies of imported paper and pulp the demand for hand-made has grown and efforts have been made lately in various parts of the country to increase the output of hand-made paper and to improve the quality.

The Association has permitted the use of power-driven machinery for the production of pulp from locally available raw materials, provided the use of power adds to the volume of employment within the industry and the plant is controlled by the State or a non-profit seeking body.

The leather industry is one which was carried on initially in rural areas but in recent years has become centralised. The aim of the Association is to revive the centres of tanning and leather manufacture that existed in rural areas and to ensure at the same time that the best scientific methods are pursued in the production of leather goods. The use of hides and skins obtained from the carcasses of dead cattle alone is permitted with a view to discourage the slaughter of cattle for the sake of their hides and skins. On economic grounds Gandhiji considers such slaughter as a wasteful use of the nation's cattle wealth which should be conserved both for the sake of its agriculture and for the requirements of the people in respect of milk which is an essential article of the nation's diet. "The cow must die at the hands of the butcher," Gandhiji has remarked, "unless we learn the art of increasing her capacity of milk-giving, unless we improve her stock and make her male progeny more useful for the field and for carrying burdens, unless we make scientific use of all her excreta as manure and unless when she dies, we are prepared to make the wisest use of her hide, bone, flesh entrails, etc."

THE *GO SEVA* SANGH

While the latter part of the programme is mainly the concern of the A.I.V.I.A., for attending to the former part of the campaign for the preservation of the cattle wealth of India, Gandhiji has assisted at the establishment of yet another body, the *Go Seva* Sangha or the Society for the Service of the Cow. This body which was established in September 1941 has for its object the bringing about of an all-round improvement in the condition of the cow and her progeny by various methods such as inducing the public to patronise cow's milk and milk products, encouraging scientific breeding, carrying on investigations relating to animal nutrition, reorganising the working of *Goshalas* now in existence in different places, and, lastly, ensuring full use being made of the hides, bones, flesh, etc., of the carcasses of unslaughtered animals. This body has commenced work by undertaking the supply of cow's milk to the town of Wardha, encouraging the reorganization of *Goshalas* in various places on approved scientific principles and opening new ones on these lines at various centres. The

Sangh also provides instruction in cattle breeding, dairying, managing *Goshalas* and in other aspects of the movement for the service of the cow.

The Training of Workers

The A.I.V.I.A. aims at training village welfare workers as also workers who become skilled in the handling of particular industries like the manufacture of hand-made paper, oil-pressing, or bee-keeping. Apart from facilities for instruction provided at some of the provincial production centres recognised by the Association, a regular training school is conducted by the central organisation at Wardha. This provides for a ten months' course of training in economics, in problems of rural welfare and in some selected industry. Scholarships for students have from time to time been made available in the past by the Governments of the Provinces and Indian States and there is a scheme for the grant of stipends by the Association itself. Nearly thirty students were under instruction in 1941 at the Gram Sevak Vidyalaya. In addition to this elementary course, the Association has planned the provision of instruction in advanced courses involving closer economic, scientific and technical study of selected industries or research work in some special branch. The A.I.S.I.A. has a central Khadi Vidyalaya at Sevagram where training is imparted for the various diploma examinations conducted by the Association. In addition, training centres are conducted in various Provinces throughout the year, the number of such Vidyalayas in the provinces being eight. Refresher courses and short period training camps are also organised by the Association, the object being not only to add to the technical knowledge of the workers but to equip them to become village 'sevaks' of the right type. A number of prominent workers of all the three bodies are associated with the Gandhi Seva Sangh which was established over ten years ago to co-ordinate the welfare activities of a number of selfless devoted workers who had dedicated their lives to the service of the countryside according to the ideals placed before the nation by Gandhiji. The activities of these institutions extend from one end of the country to the other right up to the borders of Tibet, Assam, Sind and South India.

The Wardha Scheme of Education

It is interesting to observe that all these experiments in village reorganization have suggested to Gandhiji the now famous Wardha Scheme of education which emphasises the value of all teaching with

a basic craft as the centre. We shall refer to this scheme further later on in this work, but it may be mentioned here that eminent educationists have admitted the essential soundness of the scheme, especially for the rural areas, for which the present system of education is totally ill-adapted.

Social Reform

Finally, village reconstruction for Gandhiji is necessarily linked up with social reform. His insistence on the removal of untouchability is an instance in point. Gandhiji's workers and followers include men from all castes and creeds. He has also inspired women to come out and participate in public life.

As a result of his practice and example, the townspeople have come to appreciate the simple mode of living ; the villagers have been able, to some extent, to reduce wasteful expenditure on marriages, funerals and other ceremonies, and the rigours of the caste systems have been considerably reduced. On the whole, by creating an entirely new religious and social outlook, Gandhiji has helped to root out many orthodox beliefs and practices and has built up a movement which aims not only at political freedom and economic reform but also encourages greater social equality and inter-communal harmony.

This is not the place to discuss Gandhiji's place in the history of India's economic, social or political emancipation, but there is little doubt that he has given the country a new vision regarding the approach to the problem of rural reconstruction and has contributed in a truly unique manner to this cause by setting into operation new forces and building up new institutions which subserve the end in view.

(2) Sriniketan (Vishwabharati)

Tagore's approach to the problem is different from Gandhiji's, quite in keeping with the characteristic difference in the personalities of these two men. For the Poet, the problem of rural reconstruction not only required the removal of poverty but also the adding of joy to the life of the villagers. According to his conception : "Poverty is indeed an important problem in the village, but the problem of unhappiness is even more important." While Gandhiji was moved by the poverty of the villagers, the Poet was touched by the sordidness and ugliness of village life and its surroundings. He would have the Village Beautiful rather than the Village Prosperous. In this task of evolving the Village Beautiful, scholars, poets and artists would collaborate and offer their contributions. It is with such a

vision that he established in 1921 Sriniketan, the Institute of Rural Reconstruction, along with Vishwabharati at Bolpur.

In establishing Sriniketan, he received considerable assistance from Mr. Leonard K. Elmhirst, the recent President of the International Society of Agricultural Economists. The aims of the Institute are : (i) to win the friendship and affection of villagers and cultivators by taking a real interest in all that concerns their life and welfare and by making a lively effort to assist them in solving their most pressing problems ; (ii) to take the problems of the village and the field to the class room for study and discussion and the experimental farm for solution ; (iii) to carry the knowledge and experience gained in the class room and the experimental farm to the villagers in the endeavour to improve their sanitation and health ; (iv) to develop their resources and credit, to help them to sell their produce and buy their requirements to the best advantage ; (v) to teach them better methods of growing crops and vegetables and of keeping live stock ; (vi) to encourage them to learn and practise arts and crafts, and to bring home to them the benefits of associated life, mutual aid and common endeavour.

The activities of the Institute may be broadly divided into six spheres, viz., (i) agriculture ; (ii) industries ; (iii) village welfare ; (iv) co-operation ; (v) scout organisaton and (vi) education.

In the sphere of agriculture, the aim of the Institute is to help the farmers who are illiterate by actually demonstrating to them the benefits from improved and scientific farming. For this purpose, experiments are carried out in the farms in the introduction of green manuring crops, improved types of sugarcane, etc. In places where there are irrigation facilities, potatoes are grown. The agricultural section has devised a new method of storing potatoes and one which is within the reach of the farmer. A dairy institute has also been established, (i) to supply both Sriniketan and Santiniketan with fresh pure milk, and (ii) to breed cattle, not only at the Institute, but to induce the cultivators to follow the scientific and systematic method of breeding, so that they may have not only good milch cows but also sturdy draught animals. Similarly, a poultry section has been organised in which experiments in introducing better breeds are carried out and apprentices are trained up. In regard to industries, training is given to students in weaving. The weavers have been taught to improve their designs, to work on improved looms and to organise purchase of materials and sale of their produce co-operatively.

Training is also provided in tannery, carpentry, pottery, book-binding, embroidery, tailoring, etc. Researches in indigenous dyes have also been carried out.

The village welfare department of the Institute has under its charge the programme of health and sanitation in the surrounding villages. For this purpose it is equipped with a well-qualified medical staff. There is also a well-equipped dispensary located at the Institute which takes in out-patients every morning, the afternoons being left for visits to the villages. The department with the help of the medical staff also organises co-operative health societies in the villages.

The Institute has recognised co-operation as the keynote of village welfare in rural reconstruction and therefore has organised co-operative societies for credit, health and other objects. A central co-operative bank has also been organised to which other societies are affiliated.

The introduction of scout activities is considered essential in the programme of rural reconstruction and rural education and hence Brati-Bālaka or scout movement has been organised at the Institute. The Brati-Bālakas (scouts) have been doing very useful work at the time of fairs in the surrounding villages, in extinguishing fires in the village, collecting refuse and in collecting and burning soiled clothes in case of cholera and other epidemics.

The Institute maintains a number of night schools in villages for poor children. A circulating library is also maintained at the Institute. Lectures on health and sanitation, co-operation, religious and cultural subjects and also various other topics are arranged by the Institute. Training camps are also organised for training village boys as leaders of Brati-Bālakas in their own villages and to give an introductory training to young men from the villages and towns and to school teachers who may wish to take up some form of village welfare or reconstruction work. The District Boards, the Co-operative Department of the Government of Bengal, the Co-operative Organisation Society and many other organisations have been co-operating with this work and sending delegates to these training camps. The general programme of these camps includes : (1) Camp life and house craft, (ii) handicrafts and elementary agriculture, (iii) scout organisation, including a study of nature in its relation to life, (iv) co-operation, sanitation and hygiene, and first aid, (v) recreation—drama, games, songs and story-telling.

Along with Sriniketan, Vishwabharati has an economic research department which carries out field surveys and other studies and publishes their results.

(3) The Servants of India Society

The Servants of India Society has organised a number of centres for carrying out rural reconstruction work. At the Mayanur Rural Centre in Madras Province, agricultural and industrial schools and hostels have been organised with accommodation for about 70 boys and girls who are given three years' training in agriculture, poultry-rearing, bee-keeping, animal husbandry, mat-weaving and textile weaving, improved methods of spinning, etc. A Rural Centre has also been organised at Shandanjana (C.P. and Berar). The activities of this centre include a maternity home, child welfare clinic, training of *dais* by health visitors, textile weaving, poultry rearing, garden cultivation with well irrigation, and introduction of improvements advocated by the Agricultural and Sanitary Departments including the bore hole latrines and soak pits.

Two centres at Sarsa and Khiri have been established in the United Provinces. The activities of the centres include distribution of better seeds, carrying out of anti-malaria campaign, running of schools for boys and girls and promotion of cottage industries. Similar work is done at two other centres, viz., Tangi and Chowdwar.

Much useful work is done under the auspices of the Devadhar Malabar Rural Reconstruction Trust. There were eight rural reconstruction centres working at the end of the year 1941-42. Three higher elementary schools, three elementary schools, three co-operative societies, one harijan colony and a Village Industries Institute were conducted during the year. Weaving, agriculture, coir work, soap making, etc., are taught in the schools, while the Village Industries Institute at Gopalpuram gives instruction to nearly 100 teachers of elementary schools in pre-vocational training.

Useful studies are published from time to time by the members under the auspices of the Society on primary education, farm labour, tenancy system, debt legislation and such other problems bearing on rural life and economy.

(4) Adarsha Seva Sangha, Pohri, Gwalior

The rural reconstruction activities of the Adarsha Seva Sangha provide a good example of what useful work can be done by private initiative under the patronage of an enlightened landlord. The

Sangha was started in 1921 and owes its origin to the efforts of Pandit G. K. Puranik, the Founder and President of the Institution. The Pohri Jagir belongs to Col. Raj Rajendra M. N. Shitole who also has actively associated himself with its work. The Sangha has five centres where rural reconstruction activities are carried on. In 1940, a " Ten-Year Plan of Rural Reconstruction " for the whole jagir comprising 232 villages was drawn up, the main end in view being to raise the *per capita* monthly income from about Re. 1-4-0 to a " living wage " of Rs. 5. The programme also aimed at eradicating social evils, liquidation of illiteracy and extinction of indebtedness by making the villagers pay off at least 10 per cent. of their debts every year.

The work of rural reconstruction is being carried out at each centre through Gram Sudharak Sabha, comprising elected members from amongst the villages associated with it. The Secretary of the Sabha is a worker apponited by the Sangha. He stays at the centre permanently. The work consists of keeping of accounts of income and expenses on agriculture for each family at all the centres, asking the farmers to use composite manure in sufficient quantity, to plough their fields deep and to use approved seeds only. Earnest efforts are also being made to improve the condition of the cattle, specially of cows and bullocks. A programme for bringing about reduction in debts has been drawn up and efforts are made to bring about amicable settlements of debts. At the same time pressure is brought upon the villagers to avoid all extravagant expenses on ceremonials and social functions and to curtail to the utmost their unproductive expenses. Seed stores have been opened at various centres. In order to provide drinking water to the villages and to provide irrigation facilities, old wells have been repaired and new wells have been dug in several villages and in this work villagers have been contributing in the form of labour. Stress is laid on the development of cottage industries such as weaving, spinning, rope and mat-making, etc. In order to teach villages self-help and self-reliance, religious discourses are held regularly. Adult and infant classes are held at each centre in order to propagate literacy among the people. A library is also maintained at each centre. In order to provide medical aid to village people, medical chests are provided at each centre. Attention is also given to village sanitation. Village lanes are cleaned regularly and other steps are taken to maintain village sanitation and hygiene. Improvement of means of communications is also included in the programme of

work, under which approach roads are constructed. The entire work of rural reconstruction is being carried out on a comprehensive plan. The Sangha publishes a monthly magazine in English known as "Rural India." Recently it has started rural workers' training college which it aims ultimately at developing into a Rural University.

(5) Sir Daniel Hamilton's Work at Gosaba

The work done by Sir Daniel Hamilton in his estate at Gosaba is another example of what a private individual can do for the welfare of the rural population. His life's mission was "not to enrich a few, but to help many."

It was in 1903 that Sir Daniel Hamilton took from the Government a lease of forests of three islands in the southernmost part of the Sunderbans for deforestation and colonisation with a view to creating an ideal estate and tackling in his own way the problem of unemployment among the middle class people of Bengal. To that end the land was let out to *bona fide* cultivators. The estate now comprises four islands of the total acreage of 22,000. It was with great patience and at the cost of a good deal of labour that the land was reclaimed. Sir Daniel had also to encounter some difficulties in attracting settlers due to the malarial climate of the area. As a life-time votary of co-operation he desired to solve the problems of the estate on co-operative lines. He first started a credit society in 1916 with the initial capital of Rs. 500 provided by himself. The success of this society led other villages also to form societies for meeting their credit needs. These societies were subsequently federated into a Central Society—the Gosaba Co-operative Central Bank—organised in 1924. There are at present 24 village societies affiliated to this Central Bank. Sir Daniel also assisted the settlers to wipe off their old debts due to Mahajans and money-lenders and thus to start their life in the Gosaba Estate with a clean slate. The loans are issued by village societies generally five times in a year for such objects as cultivation, purchase of cattle, maintenance and other unavoidable expenses. Recovery is effected from crops. In order to link marketing with credit, Sir Daniel established a Paddy Sale Society in 1922 with the object of pooling the produce of the members and disposing of the same in the best market. It may be mentioned here that the main produce of the estate is paddy. Further, a rice mill was established in 1927 as an annexe to the society in order to sell the produce of the estate in a finished state. The paddy sale society has also purchased boats for transporting paddy to Ultadanga which is the most important paddy market of Calcutta.

A co-operative store was also organised in 1919 to supply the members of all co-operative societies in the estate with daily necessities of life at cheap rates. With the object of solving the unemployment problem, Sir Daniel started the Rural Reconstruction Institute in 1934. Young men are given training, both practical and theoretical, in agriculture, co-operation, weaving, accountancy, dairying and poultry. The course covers two years and after its completion I.L.A. (Art of Independent Livelihood) certificates are granted to successful students. A number of schools has also been organised in the estate for imparting general education. There is also a central model farm where experiments are being carried out for improving seeds, seedings, manure, etc. To cater to the medical needs of the tenants, three charitable dispensaries have been opened in three different centres of the Estate under competent doctors and tenants obtain therefrom free medical advice and supply of medicine and in cases of necessity they also get the benefit of free visits by doctors. A midwife is also maintained by the estate for attending to maternity cases. Two rural reconstruction societies have been started for improvement of economic conditions and health of the members and also for the spread of education among them. Steps to improve the live-stock have also been taken. Fifteen *dharmgolas* have been started in different centres of the estate with the object of keeping reserve stocks of paddy to meet unforeseen emergencies such as famine or scarcity. Even disputes in the estate are settled by arbitration and hence there is no litigation. " The Boards of Directors of the co-operative banks, who look after the welfare of the villages and govern them act as courts of justice. The High Court is the directorate of the Central Bank, together with the directorates of any six village banks. They compose disputes, act as a court of wards and control the *dharmgolas*. As a result there was not a single criminal or civil case within the estate for over 30 years and even the Government survey and settlement operations recorded not a single dispute. They got together once a month in the Samabaya Baithak to forward their recommendations to forward their recommendations to the General Welfare Committee, the Advisory Board of the estate, and so Gosaba marches on. Sir Daniel Hamilton, the founder, is no more, but the Estate continues to work under his inspiration with Lady Hamilton as guide and leader.''*

(6) Christian Missions and Rural Reconstruction Work

Various Christian Missions in India have been doing commendable work for rural reconstruction, primarily for their followers. Profes-

* *Indian Farming*, November 1942, p. 577.

sor James Kellock has kindly given us a note on the subject which we give as an Appendix at the end of this chapter. Here we give a brief account of the activities of these Missions under three main heads, viz., (*a*) education, (*b*) medical service, and (*c*) rural reconstruction. The National Christian Council has established a Committee on Rural Work for this purpose and the Provincial Christian Council have similarly Rural Service Committees functioning under their guidance.

(*a*) *Education*

It has been recognised by the Missions that for successfully carrying out of the work of village welfare, the removal of illiteracy among the rural masses is not enough ; the education imparted to them should also be in harmony with the rural environment and life. The system of education as directed by these Missions has in view, character building, the raising of the standard of general intelligence, spread of literacy, recreation, cultural activities and instruction in subsidiary and constructive employment. These Missions run educational institutions, about 2,000 elementary schools, 325 high schools and 38 colleges. In order to impart both theoretical as well practical training to the students and to equip them for life, central institutes attached to rural reconstruction centres have been established. Even the colleges though situated in urban areas and imparting higher education have not failed to take interest in village welfare work and the achievements of some of them stand out as shining examples of what good work can be done by similar other educational institutions in the country. For example, the Christian College at Lahore has a well defined Department of Rural Life Research and Extension. It has been co-operating with the Martinpur Youngsonabad Rural Reconstruction Centre which has become a reality a working laboratory for the study of Human Relations in Village Areas. The Hislop College, Nagpur, has organised a rural extension service in order to relate the college to the life of the rural community and the students have responded with great enthusiasm to the appeal for organising an active rural service. The village chosen is a few miles from Nagpur and the work includes the running of night schools, the teaching of handicrafts, the rendering of first aid, and lessons on cleanliness to villagers. In addition to this service, groups of students, under the supervision of professors, visit well developed rural reconstruction centres for the purpose of studying their methods.

(b) *Medical Service*

Throughout the length and breadth of the country hospitals have been established by the Missions and many of them are located in rural areas. Nearly 2.5 million patients are treated by them annually in the dispensaries, in the tuberculosis institutions, in the asylums of the Mission for lepers and in the homes of the people. The Christian Medical Schools at Miraj, Ludhiana and Vellore have achieved countrywide fame. Apart from rendering medical service to the masses, these hospitals have become effective centres for imparting training in medicine, nursing, compoundng and midwifery, and the students after receiving training have established themselves in villages to carry on the good work.

(c) *Rural Reconstruction*

The rural reconstruction activities of the Missions are varied in character. At Martandam, Ramnathpuram, Patancherry and some other Y.M.C.A. Centres, there are agricultural institutions and demonstration centres.

It will be seen from Professor Kellock's note that the rural uplift movement of the Missions is based on three important considerations. Firstly, it is felt necessary that the several centres should share the benefit of one another's experience. For this purpose, the Rural Work Committee of the National Christian Council and the Rural Reconstruction Committees in the Provinces work as clearing houses of information on all kinds of rural uplift endeavour and thus facilitate new ideas and improved methods. Secondly, the programme of work is made as comprehensive as possible to include all aspects of village life in the improvement scheme. Thirdly, the rural problem is treated as a spiritual problem which can be solved only by awakening the mind.

Rural training and demonstration centres have been established at Mogha, Sangli, Katpadi, Ankleshwar, Kurnool and elsewhere ; in Gujerat and Assam, they have their farm settlements. Some of the agricultural institutions and demonstration centres have been doing useful work for the last twenty years and more. Three classes of people have benefited from their work, viz., farmers who are interested in the direct application of promoting practical improvements through Missions and institutions with which they are connected ; and leaders of communities such as pastors, teachers, supervisors and managers. Courses offered in such institutes and demonstration centres include elementary agriculture, gardening and fruit produc-

tion, bee-keeping, poultry keeping, animal husbandry, co-operative organisation, essential mechanics, home and house improvement, methods of prevention of disease, simple tailoring and mending, improved methods of preparing products for the market, marketing and banking, adult education, visual education, methods of propaganda, rural leadership, temperance, village and circulating libraries, boys' and girls' organisations for recreation and leisure time activities, and all year productive employment. Each rural reconstruction unit seeks to conserve the spiritual life of the community and to foster all that makes for better living. The areas in which such institutes have been functioning have increasingly become laboratories for investigations. Each institute and demonstration centre possesses unique features and specialities. Experimentation and co-operative marketing including animal husbandry and experimental cultivation are common to all. The Agricultural Institute at Katkadi has developed a comprehensive programme including work in all the improved varieties of farm animals and crops of every kind suited to the locality. After these different breeds of animals and varieties of seeds have proved their value as compared with the local varieties they are distributed widely for use in the villages. Dr. Spencer Hatch's untiring efforts in South India are too well known to need elaboration. Representatives from all parts of India as well as foreigners attend the Martandam Summer schools or visit that centre. The strength of Martandam lies in the ability to organise sub-centres where developments can be made according to the need of the respective local areas. The organisation of clubs for the sale of cattle, eggs, cashewnuts, goats, honey and milk, the efficiency with which they are conducted and the manner in which the Martandam Centre co-operates with these clubs in finding markets and developing their interests have spread the spirit of enterprise and initiative throughout the region roundabout. Dr. Hatch has so successfully organised fowl raising and egg marketing on co-operative lines, that the clubs have become self-supporting ; they have constructed their own central building for collecting and marketing eggs and they have their own whole-time secretary. The Sangli Movable School is unique. It maintains a truck fitted with a dynamo to produce electric current for light and projection of moving and other pictures, and is an example of how such centres should be equipped. In the area of this agricultural centre, villages are near together and weekly open markets are easily available affording excellent opportunities for contacts with the people. The Ankleshwar school in Gujarat has specialised in vocational practice by experimentation. The Mogha

school in the Punjab is well known for the spiritual and cultural training it imparts to students. The Ushagram experiment in Bengal is well known for establishing model village conditions in connection with the boarding schools for boys and girls and housing students in model village houses constructed by themselves. It has proved to be a practical example of economical housing, cheaply constructed improvements such as septic tanks and bore hole latrines and conditions which tend to keep the student in sympathetic relations with the village homes from which they have come. The experiments at Ushagram have also been copied in many other centres.

Apart from the National Christian Council and its affiliated organisations whose work for village welfare has been described above, there are a number of other Missions carrying on work in this direction such as the National Missionary Society, the Rural Service Union, the Industrial Missionary Association of South India, the Gond Seva Mandal and others.

In short, whatever one's views on the policy of the Missions in respect of proselytisation, it has to be admitted that they have done very useful work for the amelioration of the rural population. Some of their studies of the rural problems and the efforts made towards their solution also reveal an understanding which is not usually found in the Government Departments set up for this very purpose.

(7) Kisan Sabhas and their Programme

The origin of Kisan Sabhas is to be traced to the acute agrarian distress in U.P., Bihar and other parts of the country and the feeling among radical reformers and politicians that the organisation of the Kisans of the country was an essential preliminary to any mass movement for the abolition of feudalism and the attainment of political independence. In 1935 was founded the All-India Kisan Sabha with branches all over the country and with a definite policy and programme.

The Indian peasant's traditional way of reacting to oppression or injustice was non-payment of taxes or rents when the grievances were relatively small, or migration to a neighbouring territory, when they were intolerable. Even after the advent of the East India Company, this was the method adopted when the taxation on land was felt to be burdensome. Several such protests were made by the Kisans during the administration of the East India Company in Southern India which led to a special investigation by an officer deputed from England for the purpose.

However, during this period there arose a new problem for the peasantry as a result of the introduction of the law of contract in place of the customary rules followed hitherto in respect of land and money transactions. The Indian farmer had in the past certain traditional relations with the money-lender. The latter was as much a part of the rural society as the former, and the relations between the two were settled in terms of rough canons of equity. Both had to adjust themselves to one another, and neither party could enforce its claims beyond a certain point. But, with the introduction of the law of contract based on an individualistic outlook on life, the communal bond between the different rural classes snapped. The money-lender could enforce his claims in a court of law and deprive the farmer of his land, which, in turn, would be let out to the farmer, now reduced to the position of a tenant and compelled to pay a part of the produce to the landlord-money-lender. The consequence was acute discontent resulting in agrarian riots, which sometimes meant the killing of money-lenders, burning of their houses and the tearing up of their bonds. Several such riots took place in India during the latter half of the nineteenth century—for instance, the Santal's Rebellion in Bengal and Oudh (1855), the Deccan Riots (1874) and the Ajmer Riots (1891)—which compelled the Government to pass protective laws such as the Deccan Agriculturists' Relief Act of Bombay and the Land Alienation Act of the Punjab.

The Champaran struggle under Gandhiji's leadership aroused public conscience in the matter of the grievances of the peasantry against the zamindars, Indian and European. This led to the investigations of the grievances of Kisans in other areas like Bihar, Assam and Andhra and these brought to light the abject condition of the peasantry under the Zamindari system. Kisan Sabhas were then formed in different parts of the country and these have now been linked up into the All-India Kisan Sabha as mentioned above.

This organisation stands for complete independence for India and visualises thereafter a workers' and peasants' *Raj*. Its immediate programme demands mainly (1) the abolition of the Zamindari system all over India under whatever form it may be operating, (2) the introduction of a sliding scale of taxation, (3) a moratorium in the payment of moneylenders' dues or their liquidation. Besides, there are several other demands, such as a policy of reclamation of land, such lands to be thereafter given to Kisans for co-operative farming, reduction of irrigation charges, starting of co-operative societies, etc.

The All-India Kisan Sabha at first worked as a left wing of the Indian National Congress. Later, it was felt that the Congress programme was not sufficiently radical, and so a separate programme of its own was chalked out by this organisation. The following are some of the main items in that programme.

(1) Organisation of Kisan marches by way of demonstrations to Government offices or Assembly meetings or to the Zamindar's residence.
(2) Kisan rallies at different times for discussion of grievances or expression of opinion on Government measures affecting them.
(3) Adoption of the Red Flag as their emblem and the singing of specially prepared songs ; organisation of Seva Dals.
(4) Opening of training camps for their field workers, and a special school to train leaders in larger political and economic questions.
(5) Publication of their own magazines and other literature.
(6) Formation of a Kisan Party in the Central Assembly to support the cause of the Kisans.
(7) Special study of local conditions by means of village surveys and other surveys and inquiries.

The Kisan Sabha workers have succeeded in a certain measure in getting their grievances redressed by influencing legislation, but they are far from getting the Government to adopt their entire programme. They have also started taking interest in social welfare, education, abolition of drink, reduction of heavy social expenditure and such other reforms. As far as possible, they help the Kisans to redress their small grievance by peaceful means. Their affinity with the Communist Party which concerns itself mainly with industrial labour is obvious. Like the Communists, the Kisan Sabha workers have also favoured the war programme of Government. They have started training camps for their workers and special study circles for leaders where a comprehensive course in rural sociology is prescribed.

The movement is led by younger men with a new zeal and method of work and their ranks are being added to continuously. They are capable of taking active measures and evolving a militant programme. Recently some of them have settled down in some backward areas and have started constructive work there mainly in education. There are signs that in course of time they would form a real peasant party in politics and possibly their progress would be accelerated as gradually leaders come out from the ranks of the Kisans themselves.

(8) Agencies Undertaking Investigations of Rural Problems

Apart from the agencies which carry out field work and train workers for rural uplift whose account has been given in the foregoing pages, there are also agencies which carry out surveys and undertake studies, the results of which are published in the form of books or pamphlets. Research work is being conducted in several universities by the students as part of their post-graduate studies, but except in a few instances, such as Bombay and Madras, nothing substantial has been achieved in this field. The Royal Commission on Agriculture recommended the organisation of semi-official bodies of the type of the Punjab Board of Economic Inquiry for work of this character.* This Board has carried out several surveys and studies relating to agricultural finance, costs of crop production, agricultural holdings, cattle and milk problems, family budgets, food prices, sales of land, village surveys, marketing, etc., and the results of these studies and surveys have been published in the form of pamphlets. The Board receives substantial assistance from Government by way of grants and in other ways. A similar Board of Economic Enquiry has been established in Bengal, but no substantial work is reported to have been done by it, while in other provinces similar bodies do not seem to have been organised even though their establishment was recommended by the Commission. Among non-official bodies coming under this category, the Gokhale Institute of Politics and Economics, Poona, occupies a place of pride. Under its auspices, various surveys and studies, relating to village life have been undertaken and the results of such studies have been published. Mention has already been made of the research work in rural reconstruction that is being carried out at at Viswabharati and also at some of the Christian Mission Colleges. If the rural reconstruction work is to spread throughout the length and breadth of the country, there is need for many more institutions of the above type.

Among the rural life studies may be mentioned the work of some of the University Professors like Dr. Gangulee, Dr. Radhakamal Mukerji, Dr. Slater, Dr. Thomas and others who have materially contributed to the study of this fundamental problem of the country. Among the Government Officers who have availed themselves of the unique opportunities for study in the course of their official duties may be mentioned Mann and Keatinge in Bombay, Sir M. Darling, Strickland, Col. Brayne and W. Calvert in the Punjab, and J. C. Jack in Bengal as having made valuable contributions to rural life studies.

* Report, p. 615.

There are numerous economic surveys of villages or talukas made by some students and some of them are comprehensive and useful, while, a few of these also include descriptions of social life and habits. But there is a dearth of complete sociological surveys which would cover all aspects of village life, including dietetic habits, physical condition, economic well-being as also religious and social beliefs and practices.*

(9) VILLAGE UPLIFT WORK AMONG ABORIGINES AND BACKWARD CLASSES

Aborigines number nearly two and a quarter crores and form a substantial part—6½ per cent.—of the total population of India. They live mostly in hills and forests and have remained practically a neglected part of the population in the country from times immemorial. They are found in almost all the provinces and several States, though the bulk of them, almost two-thirds, live in Bihar, Orissa, Bombay, the C.P. and Berar and the Central India Agency. They constitute several tribes, prominent among which are Bhils, Gonds, Santals, Kachari, Oraons, and Khonds. They suffer from numerous disabilities, social as well as economic. They are exploited by the Forest Staff and contractors, by the money-lenders and the landlords. It is no exaggeration to say that they are the poorest section of the Indian population, not excepting the Harijans. Most of the aborigines pursue agriculture in a very crude form. Even the ordinary wooden plough is rarely used. They practise what is called "shifting cultivation." In zamindari areas they are practically serfs of the zamindars. *Veth*, or forced labour is exacted from them without any payment or on nominal payment. They are also given to drink which further drives them into poverty. Literacy is almost non-existent among them. They are a prey to epidemics and diseases and resort to quack remedies with fatal results at times. Though they are the most backward section of the population of this country they have not yet received the attention they deserve. However, there are some organisations engaged in the work of uplifting them and a brief description of their work is given below.

Among such agencies, the *Bhil Seva Mandal of Dohad* organised by Sjt. A. V. Thakkar in 1921 occupies a place of pride. It was during the famine of 1918 when Sjt. Thakkar was engaged in relief work in the Panch Mahals that he came into contact with Bhils. He was so

* A few urban surveys showing the correlation between income and health have been made, such as the one recently conducted in Bombay by the Gujerat Research Society. In Baroda a sociological survey of 800 servants of the Maharaja's household was made in 1917 by Sir Manilal B. Nanavati. It covered, beside the examination of the economic conditions, their sociological habits and religious beliefs as also their physical conditions as revealed by medical examinations.

much moved by the miserable conditions of these people that he made their uplift his life's mission. He succeeded in attracting a band of devoted workers. After patient work for years, he has succeeded in improving the moral and economic condition of these people. A number of centres has been organised in the area where schools have been established for imparting elementary education to the children of the Bhils, hospitals have been started for administering medical relief, and the social workers posted at the centres try to wean away the people from evil habits like drink and lead them to better life. Co-operative societies for credit, supply, marketing, etc., have been organised, numbering in all about one hundred, and these societies have succeeded in bringing about considerable moral and material improvement in the life of these people. The good work done by the Mandal has succeeded in attracting the attention of social workers to this most neglected problem of the country, and several similar organisations have come into existence.

The West Khandesh Bhil Seva Mandal was organised in 1938 at Nandurbar to do welfare work among the Bhils of the area. Taking advantage of the mass literacy drive initiated by the Congress Government, the Association opened a number of schools with medicines. Besides, two hospitals were established. Grain banks have also been organised for making loans in grains and taking them back at the harvest time. The Association is undertaking propaganda work for removal of drink habit and other social vices. Co-operative societies have also been formed for the benefit of Bhils of West Khandesh. They numbered some 36 at the end of the year 1940-41.

The Dang Seva Mandal was organised in 1937 for carrying on uplift work among the aboriginal tribes inhabiting the Nasik District. These tribes consist of Bhils, Koukanis, Thakars and Warlis. The Mandal is conducting elementary schools for boys and girls. There were 23 schools at the end of the year 1941-42. Medical relief was also administered by this Association. Grain depots have also been organised for the benefit of these people, such depots numbering 14 at the end of the year 1941-42. The Association also undertakes propaganda work among the people against drink habits and other social evils.

Welfare work among aborigines is being done by several other organisations also such as the Servants of India Society, the Adivasi Seva Mandal and the Christian Missions. The work of the Gond Seva Mandal under the guidance of Mr. Verier Elwin deserves special

mention. This Mandal has done extensive work for the uplift of the Gonds in the Central Provinces.

The Harijan Sevak Sangh organised under the inspiration of Mahatma Gandhi is doing extremely useful work for the uplift of Harijans (the so-called depressed or untouchable classes, who form one-eighth of the population in rural areas and also among backward tribes and aborigines). The Sangh has established a central board as well as provincial boards. The work of the Sangh is so extensive that it is possible only to make a bare mention of it here. Under the auspices of this Sangh, schools have been organised, hospitals established and propaganda for removal of drink habit and other evils carried out in urban as well as rural areas throughout the country. Co-operative societies have also been organised for supply of credit and for redeeming Harijans from the debts to Pathans and money-lenders. Rural Reconstruction centres have also been organised by the Sangh at five places. These centres are known as Birla Rural Reconstruction Centres. Similar welfare work is being carried on among aborigines and backward class people of Assam and other places.

In addition to these agencies whose activities have been summarised above, there must be a number of others for which we have not been able to gather information. The above survey is, therefore, not to be taken as exhaustive. It is noteworthy, however, that among the agencies interested in rural reconstruction work, there is no organisation established and run by the agriculturists themselves. The Kisan Sabhas have mainly a political object in view ; their other activities are secondary ; and, their leaders are not from the farmers' ranks. There are a few landlords' associations in the U. P. and Bihar, but they aim at promoting their class interests and are not concerned with the economic and social betterment of the rural masses. It may be that there have come into existence lately a few genuine peasants' organisations to voice their grievances against landlords and the Government, but of rural reconstruction activity among the villagers themselves we have as yet no evidence. The average cultivator is too uneducated, uninformed and fatalistic in outlook to organise himself and his fellows for a co-operative effort at improvement. This only adds to the responsibility of Government in this sphere. Their rural reconstruction activities have so far been meagre, as they are confined to only a few items. The present war has slackened even these activities. The departments concerned have failed to organise the rural

people themselves for a collective endeavour. The poor response to the "Grow More Food" campaign illustrates the weakness of the present organisation. If there had been peasants' organisations, associations and chambers which would inspire their confidence and claim their loyalty, the results would undoubtedly have been better. An unorganised and illiterate peasantry cannot respond to official appeals issued in an emergency, and, even from the more long-run point of view, rural reconstruction work cannot bear adequate fruit unless the rural population is suitably organised for the purpose. It is with this conviction borne in upon us on an examination of all the attempts made by Governments and non-official agencies hitherto that we have in a later section expressed the need for a change in the spirit of administration, a change in their methods of work and for a revitalisation of village life through the three institutions of economic and moral amelioration, viz., the school, the co-operative society and the *panchayat*.

Appendix I.

TALUKA DEVELOPMENT ASSOCIATION IN BOMBAY

BY D. A. SHAH

Origin.—As early as 1907, it was realized that unless propaganda for agricultural improvement was undertaken by local bodies of some sort, wide extension of such improvements was not possible. A certain number of agricultural associations were, therefore, established for districts, talukas, etc., as was found convenient. Barring a few exceptions, the associations did not, however, prove a success. The associations had hardly any full-time qualified men of their own for carrying out their programmes of work. The area of operations of many of them was too extensive. On the other hand, the agriculturists for whose needs the associations were intended to cater, had neither any financial stake, nor any effective voice in the management of the associations. As for co-operation, co-operative development committees were working in some areas with varying degree of success. In 1922, Government considered it necessary to remodel the organization for propaganda in agriculture and co-operation in order to make it more intensive and ordered that the taluka should be the unit of organization and that instead of several separate bodies working independently, there should be only one body to be called the "Taluka Development Association." Later, an exception was made in the case of the Bijapur District which, in view of special circumstances, was allowed to organize one institution for the whole district, the Bijapur District Anti-Famine Institute.

Constitution.—The objects of the Taluka Development Association include dissemination of agricultural knowledge, introduction and supply of good and useful seeds, better and improved implements and good and useful manures,

improvement of breeds of cattle, consolidation and enlargement of scattered and small holdings, development of cottage industries, and representation of the grievances of agriculturists to the authorities concerned. Membership is open to individuals and socieites, the former paying certain lump sums as patrons or life members and paying small annual subscriptions as annual members. Co-operative socieites which join the association are expected to pay small annual subscriptions based on their own membership. The general body meets at least once a year to elect office-bearers, to receive a report from the Managing Committee, to fix the annual programme of work and to sanction the budget. Management is conducted by a managing committee consisting of 7 to 11 members and assisted by two Secretaries. The Mamlatdar is usually ex-officio Vice-President of the association. The Managing Committee meets as often as necessary, but not less than once every three months. Every association has at least one full-time paid fieldman to execute the programme fixed by the association. The total number of associations at the close of the year 1941-42 was 111 with a membership of 30,543 individuals and 546 co-operative societies. All the associations are registered under the Co-operative Societies Act.

Finance.—By-laws of the association allow to it rise funds by means of entrance fees, subscriptions from members, loans, grant from Government and donations. Emphasis has been laid on subscriptions from members because only then they would feel that they are contributing towards the cost of the running of the association and that the association is their own and for their own benefit. Grants-in-aid are being given by Government to the associations from the beginning. The conditions on which the grants are given have changed from time to time, but one important principle which has been observed throughout is that the amount of the grant should, in some way, be governed by the collections made by the association from other sources. The association is also expected to build up reserves so as to require smaller and smaller grants as it grows older and older. According to the present Government order, a nominal subsidy of Rs. 100 is given to every association every year. Subject to certain conditions regarding collections or excess of expenditure over income, the maximum annual grant that the association which is not more than five years old would be eligible for, is Rs. 1,000. The maxima for the association which is older than five years but not older than ten years and the association which is older than ten years, are Rs. 800 and Rs. 600, respectively. Special grants are given to associations for particularly valuable or urgent pieces of work. The total grants-in-aid received by all associations during the year 1941-42, was Rs. 52,176. Certain associations manage to secure subsidies from Local Boards also. The total of such subsidies for the year was Rs. 18,109, i.e., more than 33 per cent. of the grants given by Government. On the other hand, receipts on account of subscriptions from individual members and socieites amounted to Rs. 24,443 and Rs. 2,014, respectively. Rs. 12,791 were received as hire of implements, Rs. 10,999 as profit on sale of agricultural requisites and Rs. 2,457 as commission on consignment accounts. Other items accounted for a further income of Rs. 31,912. The total income of all associations thus amounted to Rs. 1,54,901 during the year 1941-42. Their total expenditure during the same year was Rs. 1,52,701 consisting of Rs. 71,040 for pay of staff. Rs. 11,677 for propaganda and demonstration, Rs. 27,216 for farming activities such as seed farming, grafting, budding, breeding, etc., and Rs. 42,768 for other items. The total amount of accumulated surplus in all associations was in the neighbourhood of Rs. 2,50,000.

Working.—As the objects of the associations are comprehensive, the work of the associations also covers a wide field. The items of work undertaken by them differs in different areas. In general, they distribute agricultural requisites such as seed, manure, grafts and suckers of fruit trees and plants and insecticides, and stock improved implements for sale or hire, and arrange for storage of fodder. They demonstrate improvements in method and material, preferably on the fields of the cultivators and under the actual circumstances in which they work so as to bring home the benefits to the people. They also hold small exhibitions. They help introduction of new crops, improvements of cattle, destruction of wild animals, improvement of poultry and extension of poultry-keeping. Activities such as sub-soil water-finding, well-digging, boring and land-development also are popularized by them. Whatever items of work they undertake must be of proved value.

They do not concern themselves with matters which are in an experimental stage. Another limiting factor for their work is that in the purchase and distribution of agricultural requisites, they are not, as a rule, to undertake the work on a large scale, as they have no share capital, and are not financially strong. When particular requisites are popularized and are much in demand separate co-operative organizations are expected to take up the work of their purchase, sale, etc. A few of the associations used to supervise co-operative societies, but the work of supervision was separated and given to co-operative supervising unions in accordance with the recommendation of the supervision committee in the year 1934.

As the main work of the associations consists of propaganda, it cannot be measured by statistics, nor can it be described adequately unless it is described at considerable length. So it is proposed to mention here only a few important facts and figures. The associations maintained 211 depots. At the end of the year 1941-42, they had in stock with them implements and machinery of the value of Rs. 1,22,436 and other stock-in-trade worth Rs. 1,06,675. Two associations maintain breeding farms for Nemari breed of cattle and one of them—the Jalgaon Taluka Development Association—has been doing so very efficiently and economically that the animals of the cattle breeding farm of this association won all the prizes for the Nemari breed of cattle at the All-India Cattle Show held in the year 1941-42. Certain associations have their own model poultry farms also wherefrom they give to cultivators, birds and eggs of improved variety at concession rates. Intensive propaganda for use of ground-nut cake as manure was carried on in certain areas with the result that in the East Khandesh district alone, about 2,000 tons of oil-cake was distributed amongst members of co-operative societies in the year 1941-42. On the other hand, in the Ratnagiri district, 2,100 country mango trees were side-grafted with the Alphonso variety, and 5,000 pineapple suckers and 2,000 lbs., of cashew seed were distributed in order to encourage pineapple and cashew-nut cultivation. Most of the associations participated vigorously in the "Grow More Food" campaign.

Control.—The associations are corporate bodies, governed primarily by their own by-laws. Till recently, little outside control was provided for in the by-laws. There was an advisory committee consisting pre-dominantly of officials which rarely met and exercised little control. The committee has now been scrapped in the revised by-laws. The Mamlatdar is usually ex-officio Vice-President along with another elected Vice-President, and an elected President. The influence that the Mamlatdar wields depends on the interest he evinces and on the status and influence of the elected President and Vice-President and the interest taken by them in the association's work. In a number of cases, the Mamlatdar finds little time for this work and exercises little control. The outside bodies which were expected to guide and control the associations from the beginning were the Divisional Boards consisting of the Deputy Director of Agriculture, the Assistant Registrar of Co-operative Societies and four non-officials nominated by Government, two to represent agriculture and two to represent co-operation. Government grants were allotted to Divisional Boards which were to distribute them amongst the associations. It is as only through this power of distribution of grants that the Divisional Boards could insist on the preparation of sound budgets and programmes of work and employment of competent and qualified staff by the associations. Above the Divisional Boards, there was a Joint Board consisting of the Director of Agriculture and the Registrar of Co-operative Societies to consider and decide on the proposals of the Divisional Boards. The Divisional Boards were replaced by District Rural Development Boards nominated by Government in the year 1939. Thereafter the programmes of work, budgets, etc., of the associations go to the District Rural Development Boards for approval. In the year 1941, the control of the associations was transferred to the Collectors of the districts to whom rural development work had also been transferred. Model by-laws have been revised recently to provide for effective control of the Collectors in regard to paid staff and other matters. Grants to the associations continue to be sanctioned by the Director of Agriculture and the Registrar of Co-operative Societies and the Director of Rural Development in consultation with the Collectors. The Registrar of Co-operative Societies as a registering and auditing authority, exercises the control that vests in him under the Co-operative Societies Act.

General remarks.—As early as the year 1924-25, the associations had, according to the Director of Agriculture, become a very essential part of agricultural propaganda. In 1928, the Royal Commission on Agriculture noticed the associations favourably and remarked that the Bombay organization was well worth the study of other Provincial Governments. Since then, several important bodies, such as the Registrars' Conference and the Industries Conference have commended them. They have shown much vitality and usefulness and have proved very valuable for agricultural propaganda and canalization of agricultural information. They provide an agency for popularizing the results of research at what has hitherto appeared to be a minimum cost to Government.

Like everything else, the Taluka Development Associations are also not without defects. Annual collection of small amounts of one rupee or eight annas as subscriptions from members scattered over an extensive area is found to be very difficult. When the staff of the Revenue Department or Co-operative societies are helpful or when some influential members or office-bearers take personal interest, considerable amounts of subscriptions are collected. These factors are not common in all associations nor uniformly maintained even in the same association. The income from this source is, therefore, not only widely different in different associations, but fluctuates considerably from year to year in the same association. On the other hand, a member who pays a small subscription is not necessarily keen on exercising his rights of membership by travelling several miles to attend general meetings, or otherwise. Moreover, the scattered and cheap membership lends itself to abuse by self-seeking individuals for manoeuvring elections in their own favour, or allows the paid staff like fieldmen to become virtual masters of the associations. As for staff, only 64 out of 111 associations have trained and qualified fieldmen. Steps have been and are being taken to remedy these defects by means of outside control, with some degree of success. The other important defect is that once an association achieves a certain maximum degree of success, it has not much chance by itself of making its extensive work also intensive gradually. Its limited resources and staff do not automatically expand as work and scope for work increase. It was, therefore, to supplement the associations if not to replace them altogether that co-operative Better Farming Societies have of late been and are being organized for compact areas and with powers to grant small loans to members for purchase of improved seeds and implements and raw materials for cottage industries and to sell the agricultural and industrial produce of members.

APPENDIX II

THE RURAL UPLIFT WORK OF CHRISTIAN MISSIONS*

By Prof. James Kellock

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Christian Missions have given and are giving a great deal of attention to the subject of *rural uplift*. This is natural because about 90 per cent. of the membership of the Indian Christian Church live in the villages of rural India. In the last few decades much thought has been devoted to the rural problem by the Christian community in India. Numerous investigations have been made, conferences held and reports, books and articles written on the subjects relating to rural uplift. An extensive bibliography of these publications can be found at the end of G. J. Lapp's book, *The Christian Church and Rural India*; which may be supplemented by the bibliography in Appendix III of *The Economic Basis of the Church* (Tambaram, Madras Series, Vol. V).

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* We are indebted to Prof. Kellock who drafted this note specially for the Society.

I shall try to indicate what has been and is being done under the four headings of Education, Agriculture and Industry, Medical Service and General Considerations.

I. Education

Among the Christians the percentage of illiteracy is much lower than in the Indian population as a whole, and the percentage of those who complete *primary school* education is much higher. But still the problem of illiteracy is a pressing one in the Christian community also, and the fact of " wastage," whereby about 30 per cent. of the children who start out on the primary course relapse into illiteracy, calls loudly for remedy. There is a wide consensus of opinion that the way to overcome these difficulties is along the line of ruralizing the curriculum, i.e., arranging the education in such a way that it will be vitally related to the life and needs of the village. The school curriculum must make use of those means by which the natural interests of the village children express themselves, and the activities that it requires must be such as are attractive to the child because they are closely related to his everyday life in the home and in the village environment. It must aim to create a well-rounded personality, good in character, adequately informed, with healthy attitudes and right social ideals. Such solid foundations having been laid, rural vocational middle schools should go on to prepare the pupil for becoming a self-supporting member of the community by agriculture or industry of some kind, while not neglecting to impart a reasonable minimum of knowledge in literary subjects and enough science and mathematics to make him an intelligent and practical citizen. Rural education programmes on such lines have been worked out and brought into operation at many Christian schools and training centres, e.g., at Moga, Martandam, Katpadi, Ankleshwar, Ushagram, Vadala, Gosaba, Sangli, Pyinmana. The training centres are obviously of great importance, for it is from them that the light is spread, and at them that the teachers are equipped with the knowledge and technique that enable the improved methods of teaching to be carried out in the village schools. The training centres also hold periodically institutes and refresher courses by means of which understanding of the better methods is imparted to teachers, and enthusiasm for true education is propagated.

As regards the connection of *high school education* with rural uplift, the work that the Christian Missions are doing is of varied effect. Mr. Lapp (*The Christian Church and Rural India*: p. 55) classifies the 325 Christian high schools established throughout India into five classes: (1) Schools in large towns which have no rural contacts, except that a few of them carry on activities for the benefit of people in rural areas. These activities include such things as rural surveys, helping to clean-up villages, taking part in health compaigns, etc. (2) High Schools in smaller towns to which pupils from rural areas go, and in which the education tends to foster in the minds of the pupils a dislike for village life and conditions. This unfortunate result is not entirely the fault of the schools. It is partly due to the deplorable conditions that exist in the average village. The children acquire higher tastes and ideals at schools and the prospect of settling down in the village environment becomes uncongenial to them, especially as they see little prospect of improving the conditions. The remedy for this situation is clearly such a co-ordination of the educational system and rural reconstruction as will both guide the child's interests towards the village and also make the village environment a desirable one to live in. (3) High schools which, while strictly following the prescribed Government curriculum, do something towards providing courses of study and activities that are related to rural life. For example, a Christian high school in the Punjab has courses in agriculture, tailoring, weaving, village-carpentry and rural reconstruction. Its rural reconstruction syllabus consists of the following items: village survey, personal hygiene, disease and how to deal with it, the problem of debt, co-operation, litigation, consolidation, recreation, the villagers' enemies and how to deal with them, education, afforestation, agriculture, the spiritual and social upbuilding of the life of the village people. (4) High schools in rural areas that have introduced experiments in the way of practical training related to village life for their pupils or which provide practical training for their pupils by co-operating with some neighbouring institution that gives such training. By means of school organizations such as boy scouts and girl guides and groups for lending a helping hand in various

practical ways for community needs and to assist individuals (e.g. the old, the sick, the illiterate), useful contacts are made with the village life ; or the contacts may be made and the training imparted by the pupils taking part in the activities and the responsibilities of institutions in the neighbourhood such as co-operative societies, health organizations, rural institutes, etc. (5) High schools that are definitely trying to pioneer new methods by making the rural bias of the education the point of primary importance, while conforming to the Government curriculum to such an extent as will enable pupils to qualify for matriculation if they so desire. For example, the American Mission High School at Pasumalai teaches gardening, field work, animal husbandry and poultry raising. In this school Agriculture is a popular alternative to Matriculation. Similar experiments in agricultural bias are being carried out in the high schools at Kharar, Dhamtari and Gooty and other places. In the case of girls' schools, there are in many places practical courses connected with the general subject of Home Science. Under this heading are included such subjects as food values, cooking, bazaar accounting, home sanitation, house decoration, needlework, laundry work, home nursing and first aid, gardening and care of poultry. Examples of schools that have activities along this line are the Sherman Memorial High School at Chitoor, Ushagram in Bengal, Methodist Girls' School at Roypettah, American Mission School at Ahmednagar, Christava Mahilalaya at Alwaye, etc. An account of these and other schools that give a practical or village bias in education can be found in Miss A. B. Van Doren's book, *Christian High Schools in India.* In some Provinces of India Home Science can be offered as an alternative to Matriculation, but only those girls are likely to choose it, who do not expect to go to College, since there are no University courses up to which the Home Science option would lead.

As regards the connection of the *Christian Colleges* with rural uplift, a good deal is being done through the *scheme of extention and research* which has been brought into operation since the report of the Lindsay Commission on Christian Higher Education in India in 1931. In accordance with this scheme, many of the 38 Christian Colleges of India and Burma have been trying to help the Christian community and Church and the population at large in the way that Colleges can do, by supplying the knowledge that is needed for the solution of various problems that face the community. " Research " means the application of trained and experienced thinking to particular subjects or problems and the compilation of a body of relevant knowledge concerning them ; " extension " means the carrying of that knowledge to the places where it is needed and making it a factor of active helpfulness in the situation. A great many research studies have been or are being made under this scheme in the Christian Arts and Science Colleges in India. Many of these are concerned with rural uplift. For example, many research studies have been made by different Colleges into the social and economic conditions of the Indian Christian community in various parts of the country. In one College an investigation is being made to arrive at an " Evaluation of Mission Industrial Schools," and under the auspices of several Colleges studies are being made of particular aspects of the educational problem. In several language areas, with a view to facilitating the production of literature that will be understood by the common people and the newly-literate, research is being made into the range of words in common use. One study is dealing with the " Fundamental Christian point of view regarding wealth, prospertity and work." The psychology, outlook, beliefs and customs of the people are not being neglected in the studies ; and the aesthetic side of life is represented in, e.g., an investigation into " Lyric, Drama and Music." Another subject that may be mentioned to indicate the scope of this research scheme is the preparation of a book dealing with the Rural Reconstruction Experiments that have been made by Missions in the Bombay Presidency.

As an example of " extension " we may mention the Forman Christian College, Lahore, which co-operates in the Martinpur Youngsonabad Rural Reconstruction Centre and through it enlists the practical help of students and staff in " making surveys, conducting compaigns for better homes, health, sanitation and the applica-cation of better agricultural methods, participating and conducting exhibits and athletic demonstrations and contests, clean-village contests, model farm experiments, and assisting in giving advice to village schools in co-operating with Government

and other forces in the matter of the health of the people, veterinary service, and co-operative methods." (Lapp: *The Christian Church and Rural India*, p. 60). Mention may also be made of the rural reconstruction effort of the Hislop College, Nagpur. It carries on work in a village a few miles from the city, where the people are very poor and the conditions very unsatisfactory, conducting night schools, training boys in village scouting, teaching small handicrafts, rendering first-aid and administering simple remedies under the direction of a doctor who visits weekly for the more serious cases, and giving object-lessons in cleanliness and sanitation. Another case which illustrates the idea of "extension" work is furnished by the Union Christian College, Alwaye, which runs a settlement a quarter of a mile distant from the College. Boys of the Depressed Classes come to live and learn in the Settlement and the student body of the College keeps in close and constant touch with them. After their training the Settlement boys are expected to become leaders in rural uplift in the communities from which they come.

The Agricultural Institute, Allahabad is the only non-Government Agricultural College in India. It teaches B.SC., *Agric.* for the Allahabad University, and it also teaches B.SC., *Agric. Engineering*, being the only College in India doing this. It has conducted research on the composition of milk from Indian cows. This was done for the Imperial Council to enable Government to enact milk legislation. It is at present conducting research to ascertain the best type of ox-yoke and also the best type of ox for draft purposes.

The Institute has ten Americans on its staff and twice as many Indians. Most of the senior staff are engaged on research. One member of the staff is at present occupied in writing a monograph on Indian Dairying at the request of Research Council. The Institute has lent a member of its Staff for a year to the Statistical Department for statistical work in connection with live stock. The Central Government and also the Bengal Government have asked for loan of a member of the Staff for special work.

The Institute owns 600 acres of land and has college buildings and a fully equipped farm. It has a rural reconstruction centre five miles distant from the college. It permits and requires specialization in Animal Husbandry Dairying, Horticulture, Farm Crops, Land Reclamation and Erosion Prevention. About one and a half million dollars have been given to the Institute by people of the United States of America since 1909.

The head of the Agricultural Institute is Dr. Sam Higgin bottom whois on the eve of retirement after about 40 years of very distinguished service.

The Christian *Theological Colleges Seminaries and Bible Schools* in India prepare young men (and in a great many cases their wives also) for their future work as pastors, teachers and leaders of the Christian community, and in the vast majority of cases that work is among village people. More and more emphasis is being laid on the necessity for these persons knowing how to make their Church the centre of socially progressive activities and of their being leaders in rural uplift work. Hence we find that in the curricula of all the theological training institutions a course in rural reconstruction is included or in some connection instruction is given in subjects related to it.

II. Agriculture and Industry

Any body of people whose work brings them into close contact with the villagers of India has to come to grip with the problem of poverty try to diagnose its causes and apply practical and immediate remedies. Accordingly the Christian Missionary Movement has produced a considerable amount of literature on the subject and has been productive of many efforts and experiments of greater or lesser scope designed to improve the lot and strengthen the economic conditions of the people with whom it is concerned. In the fight against poverty it is necessary to rouse the villager

from his apathy and fatalism, to free him from the shackles of debt, to imbue him with a proper appreciation of money values, and to make him a full-time worker capable of earning an adequate income through agriculture and subsidiary industries or in some other effective way.

In many Mission areas the people are assisted in making a living by some simple organization for the production and marketing of articles that the people can make and for which there will be a demand—*e.g.*, brooms, buttons, lace, and sisal fibre products such as handbags, slippers, mats, etc. Organizations on a much larger scale are the agricultural institutes and demonstration centres that have been established in several places, *e.g.*, at Martandam, Ramanathapuram, Kosamba, Patanchery ; the rural training and demonstration centres such as those at Moga, Sangli, Katpadi, Ankleshwar and Kurnool ; farm settlements such as that founded by the Irish Mission in Gujarat and by the Santal Mission in Assam and by Sir Daniel Hamilton in the Sunderbands (Gosaba). From these various centres helpful influences radiate out to all classes of people.

The lines along which the institutes and demonstration centres work is indicated by the following list of courses taught in them :—Elementary agriculture, gardening and fruit production, bee-keeping, poultry-keeping, animal husbandry, co-operative organization, essential mechanics, home and house improvement, methods of prevention of disease, simple tailoring and mending, improved methods of preparing products for the market, marketing and banking, adult education, visual education, methods of propaganda, extension service, rural leadership, temperance, village and circulating libraries, boys' and girls' organizations, recreation and leisure-time activities, all-year productive employment, the rural reconstruction unit, and conserving the spiritual life of the community.

To illustrate what is being done by some reference to particular enterprises, we may mention the Agricultural Institute at Katpadi where improved varieties of farm animals and crops of kinds suited to the locality are being produced and distributed among the villages. Through the supply of good breeding bulls the Institute is steadily improving the cattle of the district. Through the introduction of the goat, "the poor man's cow," the diet of the countryside is being improved by provision of a cheap and satisfactory source of milk supply. The Martandam Centre, with its Summer Schools disseminating a knowledge of the means and methods of rural improvement, and with its organization of sub-centres where products like cattle, eggs, cashewnuts, goats, bees, honey, etc., are improved and graded and marketed, and the people shown how they can earn a better living, is another instance of what is being done and of what can be done. The Rural Training and Demonstration Centre at Sangli has a Movable School which goes around in a motor truck. The truck is equipped with cinema apparatus and carries around samples of improved seeds and grains, calves, fowls, etc. The Institute at Ankleshwar in Gujarat spreads the light of rural improvement by preparing young men for rural life and leadership. They go back to the villages with new attitudes and new ideas to work as teachers, labourers, farmers, artisans, tradesmen, etc.

Lapp gives the following list of village and domestic pursuits that are being developed in different parts of India by Missions and which can serve as useful and profitable home industries :—Bee-keeping, book-binding, brass-work, canning fruits and vegetables, bulb-cultivation, carpentry, carting, cotton ginning, cleaning and carding, cow-keeping (for small dairying and home consumption), drying fruits and vegetables, fisheries on a small scale, fowl raising for sale and for the eggs, fruit raising, gathering and marketing forest products, groundnut raising, goat-raising, honey manufacture and bottling, knitting, nut-raising, ornamental wood, stone and ivory work, oil-manufacture papier-mache, paper pulp making, pottery making (especially ornamental pottery), preserving fruit and vegetables, rearing rabbits and doves for food and market, sericulture, specialized service in a village such as ridding garden and field of plant and insect pests, silver work, smithing, soap-making, toy-making, vegetable gardening, weaving cloth, tape, rugs, mats, etc.

III. Medical Service

The medical service rendered by Christian Missions is predominantly conducted for the rural population and for the poor. The need of the rural masses for medical facilities is very pressing for many reasons. There is a deplorable amount of preventible disease among them ; they are the victims of a vast amount of medical quackery and of harmful superstitious practices ; there is an infant mortality rate of 162 per 1,000 in British India (compared with 59 in England and 31 in New Zealand) ; and there is a lamentable dearth of hospitals and dispensaries and trained medical practitioners in the rural areas.

The Mission medical service may be indicated under the following heads :—

(1) *Training of doctors, nurses, dispensers, midwives and technicians.*—There are three medical schools, at Miraj, Ludhiana and Vellore ; and many of the hospitals go in for nurses training. In 1941 there were 102 men and 203 women medical students ; 14 post-graduate students in tuberculosis ; 308 men nurses in training and 1,656 women nurses in training ; 73 men and 78 women dispensers in training ; 383 midwives in training ; and 41 technicians in training. The endeavour is made to inculcate in the students the ideal of a Christian ministry of healing rather than merely the aim of a professional career. More emphasis is tending to be laid upon community welfare—especially better care of children, improved maternity treatment, moral hygiene and preventive measures against disease.

(2) *Hospitals and Dispensaries.*—The number of hospitals in 1941 being conducted by the Christian Mission in India, Burma and Ceylon was 288, and dispensaries 641 ; and they treat about 271,000 in-patients per year and about 2¼ million out-patients per year. Over 200,000 operations were performed, and nearly 37,000 midwifery cases dealt with. Most of these Christian hospitals are situated in places of moderate size, and many means are being used to bring the medical services to where the villagers can take advantage of them and to secure that outcastes and people of the Depressed Classes get attention. Some European doctors and nurses have gone to live in villages to carry on their work there. One such nurse, speaking of her work in the Chingleput District of Madras, says : "I do not believe it is possible yet in our villages to run centres on purely 'welfare' lines, *i.e.*, instruction in health, including advice regarding the care of children, isolation from infection, etc. I have found that it is *through* our successful treatment of the sick that advice regarding health matters has been listened to. So often we hear, 'but that is our custom.' Nothing will change that except an object lesson, worked out in the midst of the people, showing them that to go against their established custom does not bring devastating consequences, but rather more happiness, health and comfort." A Mission Hospital in the U. P. carries on a Rural Extension Medical Work whereby it tries to bring medical services into the *mohullas* of the untouchables, spreading the knowledge of how to prevent disease and how to use simple remedies. Other hospitals have organized a system of travelling dispensaries. For example, the Hospital at Vellore has been doing this for the past 35 years. The medical motor car stops at certain fixed places on the road on certain fixed days, bringing the doctor and his assistants with their medicines and apparatus to the sick people waiting them by the roadside. The car also stops at intermediate places, if a bed is seen by the roadside, or a group of waiting people, or if a signal is raised.

(3) *Sanatoria for sufferers from tuberculosis.*—There are 10 sanatoria conducted by Christian Missions. They gave in-patient treatment to 1,881 persons in the year 1941.

(4) *Homes and Hospitals for Lepers.*—The number of these is 62, and they care for about 12,000 lepers.

(5) *The Staff of workers who carry on the Medical Services of the Christian Missions.*—Foreign personnel—120 men doctors ; 148 women doctors ; 308 nurses ; 12 qualified pharmacists ; and 10 qualified technicians. National personnel—246 men doctors ; 199 women doctors ; 231 men nurses ; 807 women nurses ; 208

midwives ; 314 unqualified men nurses ; 604 unqualified women nurses ; 298 qualified men dispensers ; 132 qualified women dispensers ; 92 qualified men laboratory technicians ; 35 qualified women laboratory technicians.

IV. General Considerations Regarding the Work of Christian Missions in Rural Uplift

Three general considerations may be mentioned which have been recognized as of primary importance in the enterprise of rural uplift.

(1) The first is the *sharing of experience* so that effective means and methods may be made known beyond the places where they have been tried out, and so that the lessons derived from unsuccessful experiments may be utilized in such a way as to avoid wasteful effort. This kind of sharing has been greatly facilitated by the Rural Work Committee of the National Christian Council (a body which co-ordinates the work of the various Churches and Missions in India) and by the Rural Reconstruction Committees of its affiliated Representative Christian Councils in the Provinces. These committees have collected data on many kinds of rural uplift endeavour, and have made the data available for as wide use as possible. This encourages, the adoption of new ideas and improved methods and stirs up initiative.

(2) The second consideration is that rural reconstruction calls for a *comprehensive programme*, a simultaneous attack along several different lines. The evils that make reconstruction necessary—poverty, dirt, disease, ignorance, superstition, apathy, slave-mentality, wrong human relationships—can be successfully combated only by remedies that deal with them all. Dr. K. L. Butterfield, who visited India about 15 years ago to study rural problems and to help in forming a common programme of Rural Service for Missions and Churches, realized this need for a comprehensive programme of reconstruction. He suggested the establishing of Rural Reconstruction Units, which he defined as follows : "A rural reconstruction unit is a group of contiguous villages, perhaps ten to fifteen in number, in which as full a programme as possible of rural reconstruction service shall be made available to all the people. All agencies for educational, health, economic and social progress will be urged to pool their efforts through some form of community council in an attempt to get the people to co-operate in building a new type of Indian rural community." In this connection a Conference on Rural Work that met at Poona in 1930 declared : "It is our considered judgment that the creation of rural reconstruction units having their roots in the great human interests of the church, the school, the home, the hospital and the bank, and reaching out in the spirit of Christ through co-operation to serve the religious, educational, medical, social and economic needs of all the rural people should be the united policy of missions and churches, and that the National Christian Council should do everything in its power to further such a policy."

(3) The third consideration is that the problem of rural reconstruction is fundamentally a *spiritual* problem ; that is to say, it is the problem of awakening the mind, engaging the feelings and bracing the wills of people who have for long been oppressed and depressed. The fundamental need is for a power in the individuals' inner lives which will dissolve apathy and overcome deeply-rooted inhibitions ; for an inner power which will give rise to the aspiration after betterment all directions, and which will replace a mentality of dependence by one of self-help ; for an inner power which will bring forth the fruits of courage and hopefulness and zeal for the service of the community. Experience shows that the greatest thing that Christian Missions are doing and can do for rural uplift is their work of releasing in individuals the hidden spring of aspiration, hope and love, bringing to them a knowledge of their potentialities and of their worth in the eyes of God, and developing within them an appreciation of the true life-values. Without such inner renewal, efforts to remould the environment can have little effect.

(*Note*.—Figures quoted in this paper do not take into account the work being done by Roman Catholic Missions.)

CHAPTER XIV

RURAL LOCAL SELF-GOVERNMENT

The creation of local self-governing institutions so as to harness and foster local initiative and interest occupies an important place in any well-planned scheme of rural reconstruction. There are always problems in rural areas which are of local incidence and import, problems which can most effectively be dealt with only by the local citizen body. It is proposed, therefore, to consider here what part such institutions have hitherto played in the rural reconstruction effort in this country, and what reorientation of these local self-governing institutions is now necessary.

PANCHAYATS

The *panchayat* is an ancient institution in India. It was this institution which enabled India to survive the various cataclysms of her political history and preserved the continuity of her cultural development. This body administered the affairs of the village on its own responsibility or as advisory council to the village headman. It administered justice and peace, maintained local order by watch and ward, provided for education, sanitation, public works such as erection and maintenance of buildings, roads, tanks and wells, and all other common amenities, economic and social, of village life, and collected and distributed alms to the poor. For its finances it relied mostly on the produce from the village common lands. Thus it was self-sufficient and self-supporting. Whatever the form of Government at the centre, the village remained an autonomous unit mainly self-governing. The early British administrators have paid ample tribute to these little republics, but the advent of the British rule with its highly centralised administrative system led to their decay and disappearance.

DECAY OF VILLAGE PANCHAYATS

The administration of the village by the agencies of the Central Government, extension of the jurisdiction of modern civil and criminal courts of the towns, increase in the means of communication, progress of education, new land revenue system, police organisation, migration of the best and ablest persons from the village to the town and the growing spirit of individualism facilitated its disintegration from within. The self-sufficient nature of the old quasi-democratic rural polity was broken. The village *panchayat* as a useful rural institution sank into insignificance.

Growth of Local Bodies in Towns

Gradually the need was felt for local bodies to look after their own affairs. The start for improvement was first taken in urban areas. The legislative enactments passed between the years 1842 and 1862 provided for the setting up of municipal institutions in towns. As a result of Lord Mayo's Resolution of 1870 the number of municipal bodies in urban areas increased. The rural areas did not figure at all in the scheme. Lord Ripon, however, showed a more sympathetic attitude. His Resolution 1882 on local self-government led to the passing of a series of Provincial Acts. But only Madras and Assam followed up the suggestion of setting up sub-district boards, while other provinces concentrated power in district boards. Lord Ripon's Resolution, though commended as a milestone on the road to self-government, was, as subsequent events have proved, a false step, inasmuch as the start was made at the wrong end. The process was not the federation of smaller units into larger ones, but the devolution of powers by district boards to smaller bodies. The smaller local bodies created for the taluka failed to be established and the District Boards, as the Simon Commission found, did not show much vitality.

The Decentralisation Commission, 1909

The Royal Commission on Decentralisation, 1909, pertinently remarked : " The scant success of the efforts hitherto made to introduce a system of rural self-government is largely due to the fact that we have not built from the bottom. The foundation of any stable edifice which shall associate the people with administration must be the village one in which the people are known to one another and have interests which converge on well-organised objects." The Commission recommended that " an attempt should be made to constitute and develop village *panchayats* for the administration of local affairs " even though " the system can be gradually and tentatively applied " to " make the village a starting point of public life." The Government of India published, in 1915, a resolution and issued to all Provinces, *despite the apathetic reports from most of them,* " definite instructions to give full trial to a practical scheme of village *panchayats,* wherever it could be worked out in co-operation with the people." The Montagu-Chelmsford Report recommended " complete popular control in local bodies " and added that " responsible institutions will not be stably-rooted until they are broad-based." The Act of 1919 which transferred local self-government to ministers was followed by measures in several provinces to implement this policy.

VILLAGE PANCHAYAT ACTS

The Bengal Village Self-Government Act, 1919, the Madras Village Panchayat Act, 1920 (replaced and supplemented by the Madras Local Boards Act, 1930), the Bombay Village Panchayat Act, 1920 (repealed and supplemented by the Act of 1933), the Central Provinces Village Panchayat Act, 1920, the United Provinces Village Panchayat Act, 1920, the Bihar and Orissa Village Administration Act, the Assam Rural Self-Government Act, 1926, the North West Frontier Province Village Council Act, 1935, and the Punjab Village Panchayat Act, 1935, all these aimed at the creation of local self-governing bodies in villages. The Indian States also were not inactive. The Baroda Village Panchayat Act had come into operation as early as 1904. Other progressive States like Mysore, Travancore and Cochin also passed the necessary legislations for the establishment of village *panchayats*. The Travancore Village Panchayat Act was passed in 1925, the Mysore Village Panchayat Act in 1926, and the Indore Village Panchayat Act in 1928.

CONDITIONS FOR ESTABLISHMENT

For the establishment of village *Panchayats* there is no uniform practice in India owing to the diverse circumstances and conditions prevailing in the various Provinces and States. In Bombay the Village Panchayats (Amendment) Act of 1939 has made it compulsory to have a village panchayat in a village with a population of 2,000 or over. In provinces like Bengal, Madras, the U.P. and the Punjab, the Local Government declare an area to be a village or *Panchayat* area. In every such declared area, there has to be a statutory *Panchayat.* In Mysore, Travancore, Baroda and Cochin there is a statutory *Panchayat* for every village. In Baroda the general principle is that there should be a *Panchayat* for every village with a population of 500 and more. A village too small or with meagre income is attached to the nearest village so as to form a group of *Panchayat.* Parts extremely backward having an ignorant and illiterate population are put together in a union panchayat. In other Provinces in British India, the establishment of *Panchayats* is on a voluntary basis. In the Central Provinces, for instance, the Deputy Commissioner on an application made to him by the district council or by not less than twenty adult male residents of a village makes an inquiry into the desirability of establishing a *panchayat* and then establishes one in the village. In the North West Frontier Province, the Local Government, by publication, propose to establish a council in a village ; any in-

habitant can, within three months, submit his objection, if any, in writing, through the Deputy Commissioner to the Government who, after considering the objections, may by notification establish a council for the village. In Indore, the practice is more or less the same. There, the Subha, on his own accord or on the report of the Amin, or on an application by not less than twenty adult male residents of a village, and after satisfying himself, by a local inquiry, that the residents are generally in favour of it, that there is nothing to prevent its satisfactory working, and that suitable persons are available to act as panchas and sar-panch, establishes, with the sanction of the Minister, a *panchayat*.

JUDICAL POWERS

Besides the administrative powers conferred on *Panchayats* to enable them to discharge their obligatory, optional and delegated functions, there are some judicial powers conferred on them in some provinces. In Bengal, the United Provinces, the Central Provinces, Bombay, the Punjab, Bihar, Travancore, Cochin and Baroda, the *Panchayat* is empowered to try minor cases life theft, simple hurt, offences of cattle trespass, violations of the Primary Education Act, etc. It can also entertain civil suits for money due on contracts, recovery of movable property, or its value, etc., when the value concerned is not over Rs. 200 in Bengal and the Punjab, Rs. 100 in the Central Provinces, Rs. 50 in North West Frontier Province, Rs. 25 in Bombay, and Rs. 15 in the United Provinces and Indore. Higher limits require special powers from the Local Government.

Everywhere the *Panchayat* is given exclusive jurisdiction and no other court can entertain complaints falling within its jurisdiction. The procedure of trial is rather informal. No legal practitioner can appear on behalf of any party. Usually, the only punishment which the *Panchayat* can impose is fines. In Bengal, however, the Act provides for imprisonment for default in payment of fine.

POLICE POWERS

In Bengal, the Act provides for police powers. The Union Board exercises these powers by means of its control over the dafadars and chaukidars. It is the duty of these two to keep watch and inform the president of the board and the police officer of the union cases of murder, homicide, rape, dacoity, robbery, theft, house-breaking, counterfeiting currency notes, coins or stamps or instruments thereof, grievous hurt, riot, sale or possession of arms without licence, conspiracy, breach of the peace, and all crimes and offences of encroach-

ment or obstruction to the duties of the union board, and to assist the police in the prevention of abetments or commissions thereof and in the maintenance of peace and order within the union. They have to attend muster parades and patrol regularly the beat allotted to them. They can, without an order from the magistrate or without a warrant, arrest any person for any cognizable offence or crime, or under suspicion. Their salaries and costs of equipment are paid by the union board. Unfortunately, on account of the all-pervasive Zamindari system in the province, the functions of the Village Boards are usurped by the representatives of the zamindars who always use them for their own benefit. The bulk of the village have no voice in their administration.

Finance

The Decentralization Commission suggested that a portion of the land cess collected in the village by the local board might be made over to the *Panchayat*. This suggestion is slowly being implemented everywhere. The Act in the various Provinces and States, however, provides for a Village or *Panchayat* Fund for every *panchayat*, to which are credited all allotments, general and special, contributions and donations from the Central Government, Local Government, municipality, district board or local board. All kinds of grants-in-aid, taxes, cesses, rates, tolls, fees and costs, income from property and endowments, sale proceeds, interest or penalties on arrear, forfeitures, fines and compensations, and donations from private persons are other sources of the general income.

In all Provinces and States, the *Panchayat* can take the necessary steps to augment its income according to need, and levy, with the approval of the Government or superior local body, any fee, tax, rate, cess or assessment on lands not subject to the payment of agricultural assessments. In Bengal and Bombay it has power to collect arrears even by distraint and sale of the defaulter's property. In Madras, it is empowered to take action against defaulters. In Bombay, Mysore and Baroda, it can make provision for the payment of the tax either in cash or labour. Usually the village people show considerable reluctance to pay local taxes though they do not grudge contributing to funds collected informally. That explains why the new Bombay Act has not brought new *panchayats* into existence.

Control

In all provinces provision is made in the Act for the control of the Panchayats. In judicial matters, its actions are controlled by a

competent authority with power to quash its proceedings, to revise its decisions, to withdraw or transfer cases to higher courts, and, in the last resort, to cancel its jurisdiction or to supersede it. Control over its finances and administrative activities is exercised by means of audit, inspection and power to cancel its resolutions, to execute, by means of any other authority, the duty or work neglected by it, and, in extreme instances, to supersede or dissolve it. The controlling authority differs in different Provinces and States. Generally, it is shared by Government agencies, ranging from the Tahsildar to the Collector or Commissioner, and superior local bodies, like the district or local boards. In some Provinces and States there is a regular salaried staff of *Panchayat* officers, like Registrars and Circle Officers. Where efficient central staff is appointed the *Panchayats* have worked well as in Madras, Mysore and Baroda. The District Boards have not taken sufficient interest in the development of Village *Panchayats*.

WORKING OF VILLAGE PANCHAYATS IN SOME PROVINCES AND STATES

(*a*) *Growth of the Movement.*—In Bengal, during the year 1939-40, the total number of union boards was 5,126. The total area covered by them was 58,441 sq. miles and the total population served was 42,065,143. In Madras, in the year 1940-41, there were 358 major *Panchayat* Boards and 6,706 minor *Panchayats*. In the Province of Bombay, in 1940-41, there were 1,102 village authorities, of which 75 were village sanitary committees (established under the Bombay Village Sanitation Act I, 1889) and 1,027 Village *Panchayats*. In the Central Provinces and Berar, there were, at the end of the year 1940-41, 1,083 *Panchayats*. There were also 238 group *Panchayats* covering 742 villages. In Assam, the total number of village authorities, for the year 1941-42, was 129. The union boards in Bihar numbered 168 at the end of the year 1938-39. In the Punjab, during the year 1937-38, the number of Village *Panchayats* was 1,275. In Mysore, in 1941-42, Village *Panchayats* numbered 12,142. The total number of Village Panchayats in the State was 12,061 in 1940-41 ; 879 villages formed 384 group *panchayats*, while 167 villages had united into 29 union *panchayats*. The Holkar State had 245 *panchayats* at the end of the year 1939-40 ; the total number of villages served by the *panchayats* was 302 with a population of 200,951, the ratio of *panchayats* to the total number of inhabited villages being 1 to 14. In the Bhavnagar State, in 1940-41, Gramya *Panchayats* numbered 141. In Jammu and Kashmir the number of Village *Pan-*

chayats at the close of 1942, was 461 ; the total number of villages brought under their jurisdiction was 3,210. In Cochin every village has got a *panchayat ;* three *panchayats* form a group *panchayat ;* besides, there are model or special *panchayats* for some villages where efforts are made, with State assistance and guidance, to set an example to other villages in local self-government. On the whole, out of 3.5 lakhs of villages in the provinces and States mentioned above only 32 thousand villages or hardly 9 per cent. of the total villages have *panchayats.* The progress is slow and halting because in most of the areas the appointment of *panchayats* has not been made obligatory.

Statement showing the Number, Income and Expenses of Village Panchayats in Some Provinces and States

Province or State.	Number of villages census (1941).	Year.	Number of *Panchayats*	Total income in rupees.	Total expenditure in rupees.	Judicial work (civil and criminal cases).
Bengal	84,218	1939-40	5,126	1,16,20,645	1,03,47,113	157,146
Madras	35,430	1940-41	358 Major	53,75,000	36,22,000	
			6,706 Minor	53,36,000	28,78,000	
			1,027 Village *Panchayats*	6,21,014	5,22,728	
Bombay ...	21,472	1940-41	75 Sanitary Committees			
			1,083 Village *Panchayats*	2,01,665	1,38,295	13,648
C. P. & Berar ...	38,985	1940-41	238 Group *Panchayats*			
Punjab	35,256	1937-38	1,275	91,130	51,848	19,321
Assam	33,560	1941-42	129	13,791	10,682	
Bihar	68,869	1938-39	168	5,53,896	2,25,094	13,929
Mysore ...	16,591	1941-42	12,142	40,89,482	12,56,516	
			4 Prant *Panchayats* 1 Mahal *Panchayat*	8,56,733	7,36,325	
Baroda	2,970	1940-41	2,061 Village *Panchayats*			
			384 Group *Panchayats*	11,85,653	3,15,189	
			29 Union *Panchayats*			
Jamu and Kashmir	8,740	1937-38	117	1,258	451	4,244
Holkar State ...	3,659	1939-40	245	14,543	14,449	7,098
Bhavnagar ...	644	1940-41	141	......	......	...

INCOME AND EXPENDITURE

The Statement above shows the income and expenditure of the *Panchayats* and gives an idea of the amount of judicial work done by them in the Provinces and States for which statistics were available. It will be seen from the figures that the income varied from Rs. 116 lakhs in Bengal to Rs. 1.3 thousand in Jammu and Kashmir.* The principal sources of income for the several Provinces and States vary widely. In Bengal, the *Panchayats* derive half their income

* It has to be noted that since 1937-38, there has been much progress in the State: by 1941 the number of *Panchayats* was four times and their judicial work had increased tenfold. The figures of income and expenditure for the year however, are not available.

from the proceeds of the *chaukidari* tax and one-sixth from those of the union rate. In Madras, the chief sources of income of the major *Panchayats* are house tax (46 per cent.), markets, cart-stands and slaughter houses (17 per cent.) and the Property tax (16 per cent.) ; for the minor *Panchayats* land cess (60 per cent.) was the main source of income. In the Punjab, special rates and village rates together were 18 per cent. of the total receipts. In Mysore, house tax alone brought in 72 per cent. and the tax on vacant sites and bittals 8 per cent. In Baroda, the *Panchayats* rely mostly on their share of 2 pies per anna of local cess they receive from the Prant *Panchayats* and this share amounted to about 32 per cent. of their total income. Grants from Government and local bodies were considerable particularly in Assam, Madras and Mysore.

In respect of expenditure, while it is true that the money is spent on village improvements, the items which received special emphasis varied from province to province. In Bengal, out of a total expenditure of Rs. 103 lakhs, Rs. 8.4 lakhs were spent on roads and communications, Rs. 7 lakhs on water supply, Rs. 3.6 lakhs on medical relief, Rs. 3 lakhs on education, and Rs. 2.7 lakhs on sanitation, drainage and conservancy. In Madras, education absorbed the largest amount, Rs. 16 lakhs being spent on this head as against Rs. 9 lakhs on sanitation, Rs. 7.9 lakhs on lighting and Rs. 3.1 lakhs on road construction and repairs. Similar is the case in Bihar where Rs. 1.4 lakhs or 60 per cent. of the total expenditure was on education alone. In Mysore, water supply, conservancy and sanitation accounted for three-fourths of the total expenditure. Many *panchayats*, particularly in Bengal, Mysore and Baroda, got important work such as jungle clearing and tank excavation done by organising voluntary labour from the villagers themselves.

It has been found on the whole that *panchayats*, wherever they have been instituted, are doing useful work, particularly in respect of education, health, conservancy and public works. Besides, they have been of special service for maintaining dispensaries for villagers in Bengal ; for supplying electricity and for enforcing the Town Plannng Act in rural parts of Madras ; for spreading adult education in C.P. and Berar and Assam ; for introducing agricultural improvements in the Punjab and Mysore, and for giving effect to social legislation, such as the Marriage Registration and Child Marriage Restraint Act, the Marriage Expenses Controlling Act, etc., in Indore.

In addition to these executive duties they also try trivial offences and thus save the villager from a considerable waste of money on useless litigation. Yet, work of this kind, if it has to be of last benefit, cannot be done piecemeal. It has to be done with speed and on a comprehensive scale, which means that the incomes of the *Panchayats* have to be much larger than they are at present. While it is true that there is still scope for the *Panchayats* to cast their nets wide and to increase their incomes, it is felt that the grants from Government and local bodies do not figure sufficiently large in the finances of the *Panchayats,* as they should in view of the limited taxable capacity of the rural earners.

The administration of the *Panchayats,* however, is by no means above comment. It is found, for instance, that these bodies maintain accumulated balances which are large and, often, disproportionately high when compared to their income. The major *Panchayats* in Madras having an annual income of Rs. 36 lakhs had a closing balance of Rs. 16-17 lakhs ; the Minor *Panchayats* had also a balance of Rs. 24.4 lakhs which is Rs. 4 lakhs more than their annual income. In Mysore, the *Panchayats* had an income of Rs. 16 lakhs but a balance of Rs. 28 lakhs was left at the close of the year ; the corresponding figures in respect of Baroda are Rs. 3.5 lakhs and Rs. 8.7 lakhs respectively. This failure to make full use of the funds at their disposal is most conspicuous in the case of Bihar where, let alone the opening balance, even the income for the year was not fully spent—the expenditure being only 42 per cent. of receipts for the year. It is, of course, possible that, in some cases, the *Panchayats* may be accumulating these sums for some capital projects they have in view. Even where this is the case, such a course would require shelving of many small-scale but important improvement works and, further, it would compel the villagers to wait for years before they embark upon the proposed projects. In such cases, it would be better if arrangements were made to give the *Panchayats* financial assistance by way of loans so as to expedite these bigger works for the immediate relief and benefit of the people.

In some cases, these balances are allowed to accumulate for want of necessary guidance from above, or dearth of able workers. Where men of enlightenment and experience are working on these village bodies and where the State officials too are sympathetic and helpful, the village people respond cheerfully and the results are very promising. Our review of the working of *Panchayats,* their ways and

means of raising money, and their contribution to the amelioration of the villagers warrants the conclusion that the best way of initiating rural rehabilitation work is to place every village in the country under the management of a *panchayat,* union board or union committee. India is a vast country and there is no other more effective agency to attend to an all-round improvement of village life. Excellent results can be obtained by thus harnessing local talent and resources under proper guidance, and with proper financial aid and advice.

DISTRICT BOARDS *VIS-A-VIS* VILLAGE PANCHAYATS

An important problem in regard to the working of *Panchayats* is their relation to the District Boards. The District Board is responsible for the maintenance and control of primary and middle schools within its jurisdiction. It can also sanction grants to other educational institutions. It may establish and maintain charitable dispensaries and hospitals. It has in its charge construction of public works and the maintenance in a proper state of repair of all roads, bridges, channels, buildings, etc. One of the duties of the Board is improvement of rural sanitation, and in some cases vaccination and famine relief.

In most provinces, the powers of the District Boards in respect of education, health, conservancy, public works, etc., have been delegated in some measure to the *panchayats* or Union Boards where they exist.

The administrative control of the *panchayat* is in some cases entrusted to a Government agency and in most cases to superior local bodies. In the U.P. the *panchayats* are required to co-operate with the District Board in certain matters, and in the N.W.F.P. the District Board can delegate duties to them, but no specific control is given to the superior bodies. In the C.P. the *panchayats* are controlled by the District Board subject to the supervision of Government officers. In Madras and Bengal the village *panchayats* are controlled partly by Government and partly by the District Board. The control is exercised through audit inspection, the power to veto resolutions, and enforcing the performance of particular duties. In extreme cases the *Panchayat* may even be superseded.

In many provinces, the Panchayat Act provides for appointing special Government Officers to supervise over the *panchayats* and to direct their growth ; but this provision has not been very effective as the appointment is generally left to the discretion of the Commis-

sioner of the Division concerned. The District Officer or the President of the superior local body usually does not have the necessary knowledge to effectively control the *Panchayats*. Audit and inspection are therefore not always properly done. Where, however, special officers are appointed, the Panchayats work efficiently as in Madras and Mysore and carry on useful functions.

EFFICIENCY

With regard to the efficiency of the local bodies the Simon Commission remarked as under :—

"In every Province, while a few local bodies have discharged their responsibilities with undoubted success and others have been equally conspicuous failures, the bulk lie between these extremes. Often a single local authority may exhibit a gross neglect of certain vital civic services, while showing keen and efficient discharges of other equally important activities. Cases like the following are difficult to place. A local Board faced with strictly limited resources, deliberately decides to develop one phase of activity, which it considers of greater public benefit, at the expense of another. It reduces its expenditure on roads and spends the money so saved on opening new schools and dispensaries. The neglected road soon furnishes evidence to every passer-by of undoubted deterioration. The new school or dispensary, on the other hand, passes unnoticed or fails to afford equally insistent testimony of counterbalancing effort, and the Board is naturally, though not quite equitably, added to the list of those that have proved administrative failures."

On the whole, it is undeniable that the local bodies have been found to be inefficient in administration and irresponsible in the management of education, medical aid, roads and other public works. Their supervision and control of *panchayats* is very unsatisfactory ; as advisory bodies, they have proved themselves equally disappointing thereunder. It has even been found that in some cases the staff is utilised for political propaganda and election work instead of doing public service. There are often improper appointments and improper dismissals. There is also considerable corruption. The Simon Commission pointed out that a number of cases were brought to their notice "where very large sums have been expended in order to obtain seats on local governing authorities, which suggest that those who expended such large amounts expected to be able to recoup themselves from illicit gains."

Recent Reforms

For a long time, the powers of the Provincial Governments to interfere with the affairs of the local bodies for small but essentially serious lapses were limited and the only alternative for them was to supersede the bodies and take over their administration. Governments were very reluctant to use these drastic powers and therefore the mismanagement of affairs was allowed to continue. In other countries, apart from possessing special powers for interference, Governments acquire rights to regulate affairs by means of grants-in-aid. They insist upon the appointment of qualified and well-paid men as secretaries and inspectors. Through the expert staff thus appointed they control the administration of local bodies from day to day so as to obviate the need for drastic action when it is almost too late. In India, these defects in the administration of the local bodies were only recently noticed by the authorities and attempts were made to correct them. One of the first acts of the popular ministries in 1937 was to take over the power of appointment and transfer of teachers from the local boards (as in Bombay). Other drastic measures would have followed if these ministries had remained long enough in power.

If the devolution of power to the Village *Panchayat* has to be effected, as it should be, the District Boards will need reorganisation. First of all, there should be a more rigid control over their management by means of an expert staff under the control of Government. A part of the executive work should also be taken away from them and entrusted to specialised Government agencies. The Boards should remain more as advisory bodies preparing budgets for and seeing to the administration of the *Panchayats* in their charge so that they could function as real rural development agencies. The executive functions should be left to the head of the district who should be held responsible for the proper execution of the functions within the limit set out by the budget. The primary duty of the local boards should be to foster the Village *Panchayats* which should be the proper executive body for the villages. There would be ample work for the District Board by way of deciding upon inter-village matters and services. In fact, close co-operation between the two is so indispensable that some attempts to create taluka *panchayats* as intermediate agencies for control have failed and been given up. What is necessary for the smooth and successful working of these two bodies is the allocation of responsibility for specific functions between the two, with special emphasis on the reorganisation of the district boards and the

devolution of larger powers to the *panchayats*. Any move in this direction should take full cognisance of the value of correlation between their work. In this way, the *panchayat* can be a very helpful agency to give effect to schemes of rural development under the supervision, advice and financial help of the district board.

CONCLUSION

In conclusion, we may repeat that wherever Governments have taken sufficient interest in their development, the village people have responded well. The experience so far gained has amply proved that when trusted the people have produced leaders capable of responsibility for the execution of works of public utility. They have even shown willingness to raise funds and contribute personal labour. The *panchayats* should therefore be created in every village and the people set working for their own welfare. That is the main solution of the rural problem. The attempt would fully succeed if people of goodwill, officials and non-officials, set themselves wholeheartedly to quicken and mobilise the immense store of energy, good sense and public spirit that is latent in the rural masses.

CHAPTER XV

THE EDUCATIONAL SYSTEM

IT remains now, before we close this part, to survey briefly the present educational system so as to find out to what extent work in this field has contributed to a raising of the general standard of literacy and education in the country and has helped in preparing the masses for social and economic reforms along modern lines. The importance of a sound educational system which would continually raise the intellectual standard of the average citizen and thus enable him to co-operate in all developmental activities needs hardly to be stressed. Nor is it necessary to elaborate upon the paramount importance of technical and higher training which would supply the intellectual leadership for all such activities. The educational system is not only a reflection of the existing socio-economic structure ; it determines the pattern of life for the coming generation as well. It is a recognised axiom of educational policy that the system should be devised so as to guarantee, in the first place, a certain minimum equipment to all citizens. This minimum should be fairly high if we expect an intelligent response on the part of the citizen-body to all the varied stimuli of the modern complex world. Democracy in the poli-

tical or economic sphere is inconceivable apart from such a context. Secondly, it is also expected of the educational system that it will qualify the different classes of society for discharging efficiently the functions of their respective stations in life. The more diverse the economic organisation, the greater must also be the diversity of the educational system which would have to provide facilities for the development of all the varied aptitudes and capacities of the members of the community. Hence, it is necessary to have not only an extensive, in fact, universal system of minimum schooling, it is imperative also that at all stages, the educational system should have in view the kind of life which the pupils or trainees will have to live in the years to come.

A mere statement of these broad requirements of a sound educational system should be enough to show that the present system in India has failed in both these crucial respects. On the one hand, free and compulsory primary education for all children of eligible age is yet a distant dream ; and, on the other, the literary bias of the present arrangements has led to a mass production of misfits in life. There has been so much criticism of this system from all quarters that it would be superfluous to reiterate these shortcomings here. Let us, however, examine some of the more outstanding facts closely, so as to visualise what all these years that have passed since the famous Wood Despatch have meant for us in terms of concrete achievement.

The Beginning of Modern Education

The history of modern education in India may be said to have begun with Sir Charles Wood's Despatch of 1854. It was stated in this document that the main object of the educational system introduced in India was to spread western knowledge and science, although it was desirable also to encourage Oriental learning at the collegiate stage ; that both English and " vernaculars " should be used as media of instruction at the secondary stage ; and that as Government could never have the funds to provide for all the educational needs of the country, the bulk of educational institutions would have to be organised by private bodies—whether missionary or others. It was further stated that the efforts of Government should cease to be directed to the education of the few and that the education of the masses should, in future, be regarded as a duty of the State.

As a result of the above Despatch, new Educational Departments were created and attempts were made at " improvements " in education. A large number of primary schools was established. By 1921-22,

there were 1,79,496 institutions maintained by non-Government bodies against only 2,946 institutions maintained by Government, as will be seen from the following table.* :—

	Management.	Number of Institutions.	Number of Scholars.
1.	Government	2,946	2,56,998
2.	Board	53,188	30,72,412
3.	Aided	93,629	35,01,766
4.	Unaided	16,357	5,65,384
5.	Unrecognised	16,322	4,22,165
	Total ...	1,82,442	78,18,725

Till the beginning of this century, the Government showed no interest in free and compulsory education for the masses. It goes to the credit of G. K. Gokhale who, in his striking speeches in the Central Legislative Council, brought home to Government the need for mass education. Though his ideas were not welcomed at first, since 1920 the Provinces have enacted laws for compulsory primary education. There is, however, no proper provision for financing the same ; the local bodies could introduce compulsion if they wanted, but it is forgotten that there is no country in the world which has introduced compulsory education entirely from local sources.

LITERACY

Extent.—What is the result of this policy ? The following table shows the progress of literacy in British India during the last sixty years :—

Year.	†Population (Lakhs.)	Per cent. increase.	Literacy (Lakhs.)	Percentage of literacy.	Per cent. increase.
1881	1,947	......	68¶	3.5	......
1891	2,130	9.4	98¶	4.6	1.1
1901	2,207	3.7	117¶	5.3	0.7
1911	2,317	5.0	126§	5.4	0.1
1921	2,336	0.8	148§	6.3	0.9
1931	2,569	10.0	179§	6.9	0.6
‡1941	2,958	15.1	......	......	......
	Average	7.3			0.68

* Nurullah and Naik : "History of Education in India," p. 214.
† Excluding Burma.
‡ The total literacy figures are not available, but it is stated in census for 1941 that for the whole population of India there is an increase in literacy of 70 per cent. over 1931 census.
¶ Based on statistics contained in "Literacy in India" by R. V. Parulekar, p. 11.
§ R. V. Parulekar, *ibid.*, p. 16. These figures exclude Burma.

It will be seen that for the period as a whole, while the population increased at an average rate of 7.3 per cent, the percentage of literate population increased at the small rate of 0.68. According to the census of 1931, only about 13 per cent. of the males and 2.3 per cent. of the females over five years of age could read and write in any language; and of the 353 millions included in the census only some three million and a half could speak English.*

Adult Education.—The poor state of literacy may be attributed, among other causes, to the fact that many children in India leave the school before attaining the minimum standard required for literacy, and lapse into illiteracy as they grow up. To remedy this defect, attempts have been made in recent times to enable those whose formal education either has not started or has ended prematurely to have some facilities for instruction and access to literature. At the beginning of the present century the teaching of illiterate adults was taken up by a few enthusiastic people in the Punjab, Madras, Maharashtra, Gujarat and other parts of the country. Missionaries have also actively helped in adult literacy work by furnishing literature and conducting classes. As a result of attempts of individuals, institutions and Governments, there were in 1927 about 3½ lakhs of adults under instruction in the whole of India but the number diminished to 1½ lakhs in 1932† With the inauguration of Provincial Autonomy, the Provincial Governments organised a drive against adult illiteracy. Strenuous efforts were made by various Provinces and States for the education of adult illiterates. The number of schools for adults and their enrolment at the beginning of the campaign in 1938-39 is shown below‡ :—

Province.	No. of schools	Enrolment.
Madras	12	771
Bombay	673	22,095
Bengal	967	28,152
U. P.	2,689	82,590
Punjab	146	5,201
Bihar	130	2,772
C. P.	13	1,714
Assam	13	505
Sind	28	659
Orissa	1	26
Delhi	18	230
Ajmer-Merwara	13	268

* Similar information for 1941 is not available.
† R. V. Parulekar, *op. cit.*, p. 141.
‡ "Education in India," 1938-39, p. 129.

Although statistics relating to the progress since made are not available, it may be assumed that the results achieved, while commendable, could not have been commensurate with the magnitude of the problem. For the purpose of teaching adult illiterates, some special literature has been created with a basic vocabulary of nearly 2,000 words. Lists of words frequently occurring or used by illiterates in conversation are prepared and tabulated. Short articles containing interesting, vital and useful facts are written for the benefit of villagers in their day-to-day life. In a few cases, book publishing houses send salesmen to sell literature in villages, village books stores are opened, and people are also given facilities by way of libraries and reading rooms. All this, however, amounts to a drop in the ocean. In this connection it may be mentioned that no province is making so much provision for libraries as the States of Baroda and Travancore. To illustrate, in Baroda, when the inhabitants of any village raise Rs. 100 for a free library and subscribe Rs. 25 for books, etc., the Government maintains a library or reading room or both and presents vernacular books of the value of Rs. 100. Such books form a public library and are available to all in the village. Every free public village library is entitled to receive books from the travelling libraries organised by the Library Department.* It is no wonder that literacy is relatively high in the State. There were in 1941-42, 1,380 libraries, 131 reading rooms and 390 circulating libraries in the State.†

Before leaving this topic, mention may be made of the People's Universities of Yugoslavia which are started to solve the problem of the high percentage of illiteracy in that country. These universities are located practically all in the towns and arrange lectures for the people. Some of the universities extend their activities to the villages by engaging lecturers with education films and these are stated to be attracting the masses. The objects of the Peasant Universities are defined as follows‡ :—

"(i) to teach the peasant how to look after his own health and that of his family ;

(ii) to give him the necessary agricultural training ; and

(iii) to teach him his duties as a member of the family and instruct him in the political conditions of the commune and the State."

The teaching is done by experts on different subjects and there is provision for the training of girls also. Elementary school teachers con-

* "Baroda and Its Libraries," p. 101.
† "Statistical Abstract of the Baroda State, 1932-33, to 1941-42," pp. 80, 81.
‡ "European Conference on Rural Life: Yugoslavia," p. 51.

duct courses in villages for about four months with lectures twice a week for both sexes. Free instruction is given in mother tongue, geography, arithmetic, agriculture, rural economy, hygiene, history, civics and manual work. It would be very useful to the villagers if a similar movement was started in India.

Primary Education.—The following statistics indicate the position of primary education in British India in the year 1938-39 :—

	Number of schools,	Number of pupils in Classes I to V.	Number of teachers		Percentage of trained teachers	Total expenditure.
			Total No.	Trained.		
						Rs.
Boys*	159,281	8,926,108	333,872	196,891	59.0	7,17,03,580
Girls†	28,482	2,789,419	40,592	24,280	59.8	1,41,66,883

Of the boys' schools, 15.4 per cent. were managed by the Government, 42.2 by Local Bodies and 42.4 by private agencies. The Government met 49 per cent. of expenditure on primary schools for boys and local bodies 32 per cent., the rest of the expenditure being met from fees and other sources. The cost of educating a child was Rs. 7-9-11 per annum ; in England and Wales the cost per child for education was, in 1934-35, £13 3s. 5d. (Rs. 176) a year, and has increased since.‡ The primary schools in British India numbering 1,87,763 (1,59,281 for boys and 28,482 for girls) are distributed among 4,59,391 villages and 1,724 towns giving an average of two schools for every five villages. In a population of about 296 million only 10,870,000 pupils or 3.7 per cent. of the population are in primary schools. The percentage of pupils under instruction in all institutions to the population is 5.6, as compared to 15 per cent. of population which should be receiving such education.§

Wastage

Small as is the percentage of children going to schools, there is an appalling wastage of money and energy due to the premature withdrawal of pupils before the end of the primary course. The minimum period of schooling required for achieving permanent literacy has been estimated at four years. The following figures show what proportion of boys and girls actually get that schooling in the primary schools :—

* "Education in India, 1938-39," pp. 52, 53.
† *Ibid.*, pp. 82, 83.
‡ "Cost per Child, Elementary Education," p. 5.
§ "Education in India, 1938-39," p. 8.

	Class I. 1935-36	Class II. 1936-37	Class III. 1937-38	Class IV. 1938-39
Boys	3,611,287	1,790,672	1,422,024	1,116,395
Girls	1,427,476	509,763	364,459	238,268

From the above figures it follows that out of 100 boys in Class I in 1935-36, only 31 were reading in Class IV in 1938-39 ; out of 100 girls in Class I in 1935-36 only 17 were reading in Class IV in 1938-39. That is, no less than 69 per cent. of boys and 83 per cent. of girls leave the primary schools without attaining permanent literacy. In this matter there are great differences as between one province and another.

Province.	Percentage of pupils of Class I in 1935-36 who reached Class IV in 1938-39	
Madras	32.2	21.1
Bombay (including Sind)	46.1	31.0
Bengal	16.9	4.8
U. P.	29.3	13.2
Punjab	33.9	22.3
Bihar (including Orissa)	31.3	32.0
C.P. and Berar	47.4	22.6
Assam	41.2	28.3
N.W.F.P.	23.7	17.2

Taking the figures in the above table, it will be seen that of the boys in Class I, 47.4 per cent. in the C.P., 46.1 per cent. in Bombay (including Sind) and 41.2 per cent. in Assam reached Class IV, while the corresponding percentages for Bengal, N.W.F.P. and U.P. respectively were 16.9, 23.7 and 29.3. For girls, the corresponding figures for Bihar (including Orissa) and Bombay (including Sind) were 32 and 31 respectively, and for Bengal, U.P., and N.W.F.P., only 4.8, 13.2 and 17.2 respectively. It is interesting to note that Bengal, which possesses a larger number of primary schools than any other province (in 1938-39 the number was 14,132 or 50 per cent. of the total number of primary schools for girls), has also the highest wastage percentage of 95.2 ! The remark of the Quinquennial Review, 1927-32 (p. 175) that " the whole system of girls' primary schools in the Province with a few exceptions is practically useless," still holds true.

COMPULSION

All provinces have accepted the *principle* of compulsory primary education advocated by G. K. Gokhale in 1911. But, as already stated, the principle is evaded through the local option clause. The delegation of education to Provincial Ministers, the lack of finance for educational projects and the backwardness of local bodies make universal, free and compulsory education well-nigh impossible. The comparative position of the areas under compulsion in different provinces may be judged from the following table :—

Province.	No. of villages.	No. of villages providing free and compulsory education.
Madras*	35,430	104
Bombay*	21,472	143
Bengal	84,213	..
U. P.	102,388	1,224
Punjab	35,269	10,033
Bihar	68,869	1
C. P.	38,985	1,240
Sind	6,583	758
Orissa	26,653	22

With the exception of the Punjab and Sind where 29 per cent. and 11 per cent. of the villages respectively provide free and compulsory education, the position in British India is poor beyond expectation. Even in these two Provinces, with the enormous wastage in primary education, it is probable that the percentage of literacy is not very high.

QUALITY OF EDUCATION

A vast number of primary schools are primitive in respect of equipment. The school may consist of a brick or thatched building, sometimes a veranda or even a tree (which provides no shelter from rain or dust). In Bombay (1938-39) 46 per cent. of the boys' schools were housed mainly in *chavdis, dharmashalas,* etc., which were unsuitable. The furniture is meagre or none at all, and the pupils squat on the ground with slates in hand, and are taught by a single teacher (usually a male). The teacher may be looking after two, three or even four classes at a time. The average monthly pay of teachers in boys' and girls' primary schools varies from Rs. 8-6 in Bengal to

* Two villages in Madras and 1 Village in Bombay have introduced compulsory education for girls also.

Rs. 47 in Bombay (where, however, middle schools are shown under primary). The salary is in some cases not even as much as is paid to a domestic servant ! In 1938-39, 71.6 per cent. of the 6,483 primary schools for boys in Assam, 63.2 per cent. of the 19,135 in Bihar and 62.7 per cent. of the 663 in N.W.F.P. were single-teacher schools. Of the 18,547 schools in U.P., 4,579 in C.P. and Berar and 5,926 in the Punjab, 24.4 per cent., 26.1 per cent. and 32.4 per cent. respectively, were single-teacher schools. These single-teacher schools appear and disappear at short notice and are a potential cause of wastage in education. The aim of elementary education is merely literacy and the system is condemned universally. It has failed miserably to help in the improvement of rural life. On the other hand, it has had the effect of driving away " educated " classes from the villages. " It is neither responsible to the realistic elements of the present situation, nor inspired by any life-giving and creative ideal. It does not train individuals to become useful productive members of society, able to pull their own weight and participate effectively in its work. It has no conception of the new co-operative social order which education must help to bring into existence, to replace the present competitive and ' inhuman ' regime based on exploitation and violent force."*

The poor quality of primary education is due to its administration by local bodies which are themselves not efficient. The popular ministries, when they came into power in 1938 attempted to take over the administration (especially the appointment of teachers and their transfers) from the local boards and if they had remained in office longer would probably have gone further in that direction.

Girls' Education.—A few words may be said here about the education of girls. Only 3 per cent. of the women in India are literate. No doubt, nearly all the avenues of education open to boys are technically available for girls too, but under our social conditions this means nothing. The number of males under instruction in 1938-39 was over 11 millions (11,344,972) ; the number of girls and women receiving education was only 3 millions (3,163,643).† As regards expenditure, there is a large discrepancy between the amounts spent on boys' education and on that of girls, the figures being Rs. 24 crores and Rs. 4 crores respectively. The demand for girls' education is, however, increasing. For instance, between 1937-38 and 1938-39, the total

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* Report of the Wardha Education Committee.

† " Education in India 1938-39 " pp. 6 and 79. The first figure in the text is deduced from tables.

enrolment of girls under instruction in all institutions increased by over 1½ lakhs, and in spite of a fall of over 1,700 institutions for girls their enrolment rose by 29,000 pupils. The number of girls passing the matriculation (and S.S.L.C.) examination went up by more than 1,300 to 7,290, and of those graduating by 359 to 1,024. That girls now stay longer at school is shown by the fact that whereas about 3,000 girls appeared for the matriculation examination in 1931-32, in 1938-39 the number was nearly 11,000. In 1938-39, there were in the whole of British India 553 women in medical colleges, 284 in training colleges, 25 in law colleges, 2 in agricultural colleges and 12 in commercial colleges.

The following remark of the Hartog Report is significant :—

" Despite the growing increase in the girls' education, the measures taken to promote it have been inadequate. The education of the girl is the education of the mother. The school education of each additional girl counts more towards the future than the school education of an additional boy. We are definitely of the opinion that in the interests of the advance of Indian education as a whole, priority should now be given to the claims of girls in every scheme of expansion."*

This has not been fully given effect to. India needs more educated women to work as teachers, doctors, nurses, health visitors, etc., in rural areas.

Secondary Education.—It is not proposed to go into details of post-primary education, but it will just be shown that the progress here also is unsatisfactory. The following table gives statistics relating to secondary education :—

	No. of schools.	No. of pupils Class VI to end H. S.	Teachers		Percentage of trained teachers.	Total expenditure.
			Total No.	Trained		
						Rs.
Boys†	7,453	1,486,773	102,946	57,850	56.2	7,12,37,385
Girls‡	893	174,042	14,172	8,864	64.8	1,32,34,494

Private bodies have a very large share in the management of Anglo-Vernacular Secondary Schools ; they control 78.5 per cent. of the schools against 5.3 per cent. administered by Government and 16.2 by local bodies. On an average there is one secondary school for every 62 villages, the average annual cost per scholar being Rs. 22-4-9.

* Page 347.
† " Education in India, 1938-39," pp. 36, 37.
‡ *Ibid.*, pp. 94, 95.

Secondary studies lead up to the matriculation examinations usually controlled by Universities, and conducted in most subjects in English. For this purpose English was used in the past as the medium of instruction in the two highest classes of secondary schools. Regulations for the introduction of a modern Indian language as the medium of instruction and examination have been introduced in various Provinces, but the change is, as yet, by no means general.

The Universities.—There are at present 18 Universities with an enrolment of 140,461 in the whole of India, of which 99,102 pupils are in British India studying in the 256 Arts and Science Colleges.

The present position of University education is aptly summed up in the following words :—

" The Universities are now overcrowded with men who are not profiting either intellectually or materially by their University training, and, since every student in India, as in every other country, costs far more than his fees, it is not only private but public money which is being wasted. If these students who now go to a University or a College without being really fitted for higher work were diverted in large numbers at an earlier stage to courses better suited to their capacity, money could be set free for more profitable educational uses, and the training of the best men could be appreciably improved."*

The Indian Universities are gradually realising the value of research, and some valuable work is being done in their post-graduate department. The standard of research is perhaps not as high as it should be, due, no doubt, to inadequacy of staff and lack of a tradition in this sphere. It is obvious, however, that if education is to produce the best results, it would be necessary to endow universities much more liberally than has been done hitherto. The unsatisfactory character of the present position is indicated by the fact that although some studies in rural problems have been carried out under them, there is no adequate provision for the teaching of and research in agricultural economics in most of the Universities.

PROFESSIONAL AND TECHNICAL EDUCATION

(*i*) *Organisation.*—Till 1904, vocational education in India was organised to meet the needs of public administration. Private enterprise, so prominent in general education, took little initiative in technical education. The Government Resolution of 11th March, 1904, may be said to be the turning point in this respect. There are at present, 55 professional and technical colleges and 1,025 schools, as shown below :—

* Sir Philip Hartog : "Some Aspects of Indian Education," p. 62.

Type of institution.	Colleges		Schools.	
	Number	Students	Number	Students
Law	14	6,709	...	...
Medical	12	5,561	29	7,042
Engineering	7	2,217	10	1,852
Agricultural	6	1,306	19	684
Commercial	7	4,893	370	14,055
Technological	2	150	...	...
Technical and Industrial ...	...	...	580	34,269
Forest	3	63	...	...
Veterinary	4	719	...	...
Art	...	...	17	1,982
Total ...	55	21,618	1,025	59,884

Agricultural Education.—As will be seen from the above table, in spite of the fact that two-thirds of the population is dependent for its livelihood on the produce of the soil, the provision for agricultural education is meagre. There are only six Agricultural Colleges at Coimbatore, Poona, Cawnpore, Naini, Lyallpur and Nagpur. Five of these are conducted by Government, while the college at Naini (called the Allahabad Agricultural Institute) is conducted by the American Presbyterian Mission. There are no agricultural colleges in Bengal, Bihar, Orissa, Sind and N.W.F.P. There are two central institutes for doing research work on Indian agriculture—the Imperial Agricultural Research Institute at Delhi and the Imperial Institute of Animal Husbandry and Dairying at Bangalore. The agricultural colleges have proved of limited value, as under our present conditions, the graduates from these institutions do not go to the villages but seek employment in Government service or elsewhere. Thus, agriculture does not get the benefit it ought to of the services of trained men who might be expected to introduce new methods and implements and to create a new outlook among the peasantry.

Recently, a few agricultural bias schools have been opened in some of the Provinces. For instance, in 1938 the Government of Bombay sanctioned a scheme for the introduction of vocational bias in five Government secondary schools for boys, three of which have been converted into agricultural high schools. There are at present 80 Government aided schools in Bombay where agricultural bias has been introduced, and in 1943-44, budget provision was made for 10 more schools, provided that Local Boards shared one-third of the cost of maintenance. However, in general, neither in the arts colleges nor in most of the schools, does agriculture form the subject of instruction. In most schools, children are merely taught the three R's for passing examinations which are mostly of the nature of memory

tests. Village arts and crafts, animal husbandry, marketing of crops, etc., are entirely neglected. The pupils turned out by such schools are naturally unfit to take up agriculture. The average parent in the rural areas has, therefore, no faith in modern education, as it is not difficult for him with his native shrewdness to see how unrelated modern education is to practical life.

Basic Primary Education.—With a view to replace the existing system of education by one which is more constructive and human, and which answers better to the needs and ideals of the country the Indian National Congress appointed in 1937 a Committee called the "Wardha Education Committee," to prepare a scheme of education which should be imparted through some craft or productive work. The Committee submitted its report in December, 1937. The scheme aims at rural national education through village handicrafts. It is expected that village children would be educated in the villages so as to draw out all their faculties through some selected village handicrafts in an atmosphere free from superimposed restrictions and interference.* The system of education includes basic crafts, such as spinning and weaving, carpentry, agriculture, and fruit and vegetable gardening. It also comprises social studies whose objectives are :—

"1. To develop a broad human interest in the progress of mankind in general and of India in particular.

2. To develop in the pupil a proper understanding of his social and geographical environment ; and to awaken the urge to improve it.

3. To inculcate the love of the motherland, reverence for its past and a belief in its future destiny as the home of a united co-operative society based on love, truth and justice.

4. To develop the individual and social virtues which makes a man a reliable associate and trusted neighbour.

5. To develop a sense of the rights and responsibilities of citizenship.

6. To develop mutual respect for the world religions."

Under the scheme the children are taught the mother tongue, mathematics, general sciences, drawing, music, and Hindustani. In the opinion of the Director of Publc Instruction, U.P., "this scheme is not a political stunt or a party slogan but an adaptation to Indian needs of educational changes which have won acceptance in Europe and America and have revolutionized the elementary stage of education in England."† Attempts were made in several provinces to in-

* Mahatma Gandhi's Foreword to "Basic National Education."
† Report of the Department of Education, U. P., 1938-39, p. 34.

troduce the scheme. There is little doubt that if properly worked, the scheme promises to make a valuable contribution towards placing primary education in the country on a sounder and more practical basis.

It is interesting to note here that the suggestions of the Report on " Vocational Education in India " submitted by Messrs. Abbott and Wood at the instance of the Government of India, are similar in many respects to the reforms envisaged in the Wardha Scheme of Education. The Abbott and Wood Report suggested that the education of children in primary schools should be based more upon the natural interests and activities of young children and less upon book learning ; the curriculum of rural middle schools should be closely related to the children's environment ; and that Indian languages should, as far as possible, be the medium of instruction throughout the high school stage. It was further suggested that manual work should be an essential part of the curriculum of every school, that more systematic attention should be paid to the teaching of art, and that physical education should not be limited to formal physical training and organised games, but playgrounds should be used for creative purposes. In view of the many common features of these suggestions with the Wardha Scheme, it may be hoped that the scheme of education along these lines will be given a wide trial in the interests of the rural population.

Conclusion

To sum up, it is clear from the foregoing brief review that the educational system in India is inadequate and unbalanced. On the one hand, it is too meagre and does not touch the vast majority of the masses. On the other hand, it is too literary in bias and does not fit the child for life. It does not take into account, the needs of the rural environment. Provision for vocational education is quite inadequate. Agricultural education is very much neglected at all stages with the consequence that attempts at rural improvement and reconstruction bear but little fruit. Radical steps are necessary for the extension of education so as to make it free and compulsory and this presupposes greater initiative on the part of Government. In this connection the following extracts from the Hartog Report* are instructive :—

" It (the Central Government) is concerned directly with the educational qualifications of the electorate for the legislatures and is

* Pp. 278 and 346.

therefore interested in taking steps to ensure that there should be compulsory primary education throughout India at the earliest possible moment . . . the Government of India should not continue to be divested of all power to make central grants to Provincial Governments for mass education." "We are of the opinion that they (the responsibilities of Provincial Ministers) have been reduced too much already by a devolution on local bodies, which has taken the control of primary education to a large extent out of their hands, with unfortunate results. The relations between Provincial Governments and Local Bodies demand further consideration and adjustment." This point is fundamental ; it is, in fact the central point of our argument throughout this study, not only with reference to education, but with reference to all agricultural and rural development.

The Central Government should do something more than merely publish a Report on Education in India and hold Conferences periodically. They should take an active part in the education of the country. Of late, they seem to be showing some interest in this direction. Recently, as a result of the deliberations of the Sargent Committee the Government of India have shown a desire to share the expenses on salaries of primary teachers if the scale is revised to make it decent and fairly remunerative. Further, the Educational Adviser to the Government of India has prepared a scheme for reorganising education in all its aspects both in British India and in the Indian States. The scheme aims at universal free compulsory education for all children up to a certain stage and a process of selection for further education in secondary, university and technical subjects. The scheme also aims at imparting adult education with a view to liquidating illiteracy within a certain period. It is hoped that the Government will implement a well-formulated plan along the above lines and take upon themselves the responsibility for providing the right kind of education for the rural masses by the provision of funds and expert guidance.

PART III

Constructive Rural Sociology

CHAPTER XVI

THE ROLE OF THE CENTRAL GOVERNMENT

We have set out in Part I the present position of our rural problem in all its different aspects, and in Part II we have surveyed the evolution of agricultural policy and the measures adopted by the State as also by other public bodies and institutions to deal with these problems.

First and foremost, our problem is that of providing employment and a decent standard of income to our increasing population, as much as 90 per cent. of which remains rural. This implies that all attempts at improvement of Indian economic life must start from the village or reach right down to the village. This is a perspective we owe to the teachings of Mahatma Gandhi as also of several workers and thinkers in the field who have at all come to grips with the problem. Casual observers and tourists have often been impressed with the progress of a few large-scale industries in the cities with all the amenities of modern life they afford, and they have wondered how it could be that, in spite of the introduction and extension of railways and the modern means of communication, in spite of the development of the great textile and iron and steel industries, India could still be a poor and backward country. The paradox is, however, easily solved if only one reflects that since 1871 the population has increased by 39 per cent. whereas the avenues of employment have expanded but little. Undoubtedly, the area under cultivation has increased since the advent of the British ; communications have improved ; some industries have developed, especially during the last 20 years, but all this has meant but little from the point of view of the *per capita* national income which remains according to a recent estimate as low as Rs. 66 per year—the rural incomes being still lower—so that the masses lack even the barest needs of decent subsistence, not to talk of the comforts and amenities of civilised life. The peculiar character of the economic transition in India has often been commented upon and there is unanimity among thinkers of all shades of opinion on at least two points. Firstly, that the economic progress in India has not so far been commensurate either with the vast potentialities of her natural resources or her enormous man-power ; and, secondly, that a big stride forward is now necessary unless a grave calamity such as we have witnessed in Bengal recently is to be allowed to wipe out the large surplus population of the country.

DEFECTIVE GOVERNMENT POLICY

Our survey has also brought out the fact that the main cause of the poor result, not to call it total failure of measures so far adopted, is the want of a sufficiently comprehensive policy on the part of Government. The question is not whether all the blame is to be put on Government, whether there are not other social or sociological factors in the situation which have also played their part in this story of wasted opportunities. The only point is that a properly planned Government policy could have done a great deal more in the matter, and that to-day that is the only way we can now hope to make up for this great lag in economic development which we have allowed to develop. Even western economists have spoken of the arrested economic development of India, and the Indian nationalists are by no means alone in speaking of the economic ruination of the country during the last 150 years. To bring home the gravity of the situation more vividly one has only to look round and see how the Governments of Germany, the U.S.A. and Japan, which started on their industrial career much later than England, have by a systematic policy of State aid and guidance, built up a vastly more efficient economic system. The phenomenal progress of Russia under the Soviet regime may be in a class apart, but there is hardly a parallel in any civilised country to the continued neglect of economic opportunities as in this great sub-continent of ours. In no other civilised country perhaps is the economic problem identical with the problem of providing, first of all, the very barest of means for the masses ; in no other country perhaps has the continued de-industrialisation of the country been allowed to proceed unchecked as in this country. In several European countries the unemployment of a few years in the post-war period was sufficient to overthrow or shake by the roots traditional, social and political institutions, and even Britain, the home of *laissez faire* and free trade, has had to revise her economic policies radically. France and Germany aimed at evolving a well-balanced economic structure throughout the latter half of the nineteenth century and the U.S.A. with all her rich resources followed a policy of protection in the interests of domestic employment and high wages. India alone, among the great nations, has been left out in the cold, shivering and famished, a victim in the early days of a colonial policy found impracticable elsewhere, and thereafter of a policy of tardy concessions to nationalist aspirations which only sharpened the edge of discontent and frustration in the country by bringing out more vividly than ever before the great

contrast between what might have been achieved and what was actually achieved.

Consequences of the Same

It is a mere truism to say that India lives in her villages and the character of any political regime must be judged by the extent to which it has given to the villagers a greater access to the good things of life and to the gains of modern knowledge by spreading enlightenment, hope and activity among them. So far as this rural problem is concerned, whatever may be said about the other aspects of our economic problem, the facts available seem to indicate, if anything, a definite worsening of the situation. The decay of the old village communities, the disappearance of the old corporate life in the rural areas, the decay of old indigenous industries and the failure to replace them by new ones on an adequate scale, the throwing of masses of population on already overcrowded land, the increasing substitution of non-food crops for food crops with all its serious consequences we have known of late, the miserably low standard of consumption in the rural areas resulting in premature loss of life and a draining of vitality, the heavy burden of indebtedness and, above all, the growth of an uneconomic and parasitical land system—these are evils which would stagger any economic or social reformer. Steps for amelioration have, indeed, been taken by Government in relation to a number of these problems, but, as we have already seen, they have been of a piecemeal character and altogether too tardy relatively to the needs of the situation. It would surely not be too much to say that a foreign Government, however well-intentioned, can do good only to a limited extent ; for, no progress worth the name can ever be achieved unless there is at the back of Government policy an understanding co-operation, not merely passive acquiescence, on the part of the people Discussing the economic conditions in the pre-war (pre-1914) period, Thompson and Garratt observe* : " The Government was still dominated by the Victorian tradition that its chief function was to keep the peace internally and externally and that taxation was an evil." But, even thereafter, when the Government tried to take a hand in industrial development and instituted a number of enquiries by Commissions and Committees on industries, agriculture, labour, taxation, banking, and tariffs, what has been the net result, so far as the vast masses of the people are concerned? To quote Thompson and Garratt, who are by no means anti-British : " It would be unwise to pre-

* *Op. cit.*, p. 593.

sume more about the villagers' political views than a certain weariness of a *Government which after a century still remains alien and largely incomprehensible, which has failed to curb the money-lender, the landlord, and the policeman, or to ease the country's most pressing economic problems.*" (Italics ours). The same writers no Marxists surely, attempt a little prognosis which is also revealing, if somewhat tragic, in its implications : " It may well be that when future democratic leaders suggest revolutionary changes, social as well as economic, it will be the peasants who will support them, and the landlords, business men and professional classes who will organise to circumvent them."* Writing as well-meaning Britishers, these authors whom we have quoted deliberately in preference to acknowledged critics of British rule and its achievements, they even confess to a sense of despair : " Its (i.e., India's) economic difficulties remain *unsolved* and *possibly insoluble.*" This last phrase suggests the point we have been trying to argue, viz., that there are limits to which any Government can achieve success, unless it evokes the active enthusiasm and willing co-operation of the people, and this indicates at the minimum the need for reorientation of the very character of the administration and its approach to the people. Hence, indeed, in what follows we lay so much stress on the urgency not only of evolving a new policy towards the rural problem, but also of changing the character of the administrative system, and of revitalising the life of the villagers by a massive educational effort aiming not merely at a rapid liquidation of illiteracy, but at teaching them, through educational and constructive effort, to rise to the full stature of their manhood—in a word—coming into their own after centuries of apathy, ignorance and want.

The New Policy

We have, at several places in the course of this work, referred to the lines along which a new policy of rural reconstruction has to be chalked out. The first and foremost essential of this new policy is that it must aim at an all-round improvement of the life of the villager : the new policy, let us admit, must be conceived on the basis of what we may call a new constructive sociology. Piecemeal efforts have been tried and found wanting. Economic betterment, we must now realise, is only a part of constructive sociological reform. Life cannot be lived in compartments ; its problems too cannot be dealt with in compartments. Reform must touch the whole life of man, and at all

* *Op. cit.*, p. 647.

points. In this connection, it is interesting to note how this view has accepted in the United States of America. The American Year Book (1940) " Farmer in the Changing World," explains just this development :

✓ " Rural sociology has as its primary aim the well-being of the farm population. It originated as a recognised discipline in teaching and research less than 25 years ago as a part of the general impulse to improve agriculture technologically, economically and socially. Since then it has built up an elaborate body of research findings, but it has not yet brought to bear the full impact of available knowledge, either from general sociology, or from studies made in fields other than agriculture. Owing to the fact that social causes are complex and sometimes deeply laid in the past history of social situations recognition of the existence of problems is the necessary first step in their solution. It is the function of sociology, therefore, to reveal problems as well as to assist in solving them. The roots of some of our most distressing agricultural problems are in part social, in part psychological and in part cultural."

May we also quote here what Mr. Elmhirst, President of the International Conference of Agricultural Economists, said in his opening address at the Fifth Conference at Quebec in 1938 regarding Government's responsibility in the matter :—

" One of our chief problems is the enormous increase in deliberate control of human effort and social relationship. In the days when *laissez faire* was in the ascendancy, freedom to pursue individual economic ends meant too often that the social welfare of million was left to the individual decisions of the few. Once the principle of *laissez faire* is upset, is there any ecape from the need for thought and planning in every field of social and economic activities, if each is to have a chance to flourish ? To-day we realise that such social factors as nutrition, health, housing, education and leisure can no longer be regarded as the private affair of private philanthropy but are part and parcel of the socio-economic responsibility of the modern state. Can we avoid any longer the attempt to link economic research with a wider understanding of the interplay of social and economic forces ? . . . Economists everywhere seem to agree that steady social progress is impossible without economic development, and, on the other hand, that there is no rapid economic development without social implications."

If the full mobilisation of a nation's resources can be achieved during war-time and for destructive purposes, could it not be achieved for peace-times for the less dramatic but no less vital task of ensuring to all freedom from want and from insecurity ? It is unnecessary to argue at length the case for planning, for no one could deny the importance of a national readjustment of economic and social institutions to socially desirable ends. The task in India is the more urgent inasmuch as besides our admitted backwardness in the economic sphere, we have to deal with problems of social reconstruction arising out of the need for readjusting the old social customs, practices and institutions to the calls of the new environment. Some of our social institutions have been changing in a haphazard manner under pressure of circumstances ; some are still a drag on freedom of enterprise and development of individual personality. The planning of economic life that we envisage must, therefore, also concern itself with social life and institutions, and this has to be done under the guidance of the State. The free Government of India of the future must be an educational and social service organisation, and its functions must be set in the light of the new constructive sociology defined above.

Types of Planning

The are, it must be admitted, bound to be differences of opinion as to the means to be adopted for the purpose and the desirable *tempo* of change to be introduced. Socialists and Communists would advocate a radical and rapid change ; more cautious reformers would prefer orderly growth. Some would pin their faith in rapid industrialisation along capitalistic lines ; some would argue in favour of mechanisation but under a collectivist regime, while a reformer of the type of Mahatma Gandhi, with his faith in human nature and the perfectibility of man, would seek to transform the existing system more by insistence on certain moral principles of motivation and conduct rather than by a sudden change in the institutional framework of society. It appears that under present conditions, even the minimum we have to do is so stupendous that we should be content to chalk out a constructive policy of immediate applicability so as to enlist the co-operation of all parties concerned. This, however, is no apology for standing still or evading larger issues. We must recognise that institutions that no longer ministers to human needs must be modified, however, well entrenched they may be. Modern thought places a much greater emphasis on this institutional background of social life than earlier systems of thought. It is not enough to advocate charity,

philanthropy and trusteeship as a solution to our ills ; the need is to evolve a socio-economic system which will bring out the best in man, but which will not leave any section of the community to look up to others for the exercise of these generous impulses.

The Minimum Necessary

It would, at the same time, be futile to go on discussing these ultimate implications. The best way is to start with the minimum that is absolutely necessary, and leave the rest to the future. The most practical line of approach is, then, for the Central Government to reorientate its policy and to assume full responsibility for ensuring to all citizens a common " civic minimum " in terms of sufficient and wholesome food, adequate clothing, decent housing, a reasonable access to education and recreation. We need not wait for a new Constitution embodying in its clauses what are called " Fundamental Rights " A beginning could be made here and now to arrest further deterioration and ensure steady progress by way of all-round improvements. Modern science is capable of producing spectacular results, but, in any case, it should not be difficult to raise the standard of life of the Indian people to a reasonably decent level. .

Central Government's Responsibility

In order to implement those urgent reforms the Government of India must assume the full responsibility for " the peace, safety and tranquillity " of the millions in this country, not in the narrow sense which has been accepted by all civilised Governments in the modern world. Provincial Autonomy is no bar to such a change, especially when the Central Government even now has been undertaking certain functions, though on a limited scale, through the Imperial Council of Agricultural Research. Hitherto, in vital matters like education, public health and agricultural development, the Government of India have conceived their functions narrowly as consisting of co-ordination and advice ; they have rarely taken the initiative. Admittedly questions like tariffs, currency, railway policy, irrigation and forestry which vitally affect the welfare of the rural masses are already within their purview, and if the geographical and economic unity of India is not a mere phrase, it is difficulty to see how the Government of India can evade the ultimate responsibility for the economic development of India along sound lines.

It is obvious that there are Provinces and States that are backward and are unable to maintain an efficient system of social services. Most of them are also unable to get the services of expert advisers.

Most of them have but limited funds to be devoted to reconstruction activities ; their sources of raising revenues are limited. They must therefore be helped from the Centre with expert advice and grants-in-aid, since the ability of the Central Government to raise revenues from taxes and loans is wider, and the Central Government alone can bring about a proper development of the resources of all the different regions of the country.) The Central Government has to see that the country advances as a homogeneous unit bringing uniform prosperity to all the units. Unfortunately, when for nearly 150 years till 1919, the Central Government controlled the policy for the whole country, such policy was narrowly conceived ; since then, the pendulum was swung the other way. The Central Government has handed over some of the important functions to the provinces and assumed in these departments the role of mere adviser while in some others its grip continues as before. This has now to be changed. The various plans of agricultural reconstruction that are being discussed to-day simply cannot be put into practice unless the Central Government takes the initiative and supervises the work being done under the Provincial Governments.

U.S.A.

This is in no way a novel suggestion. The same system has been operating in almost all the countries of the world. Let us take the case of the U.S.A. The States in the union are autonomous. All the same, the United States Department of Agriculture is doing work which covers every aspect of rural life. It has engaged thousands of workers, to be more precise, over 75,000, studying every aspect of the farmer's life, and putting schemes into execution. It is fully equipped to deal with every problem connected with farm-life, social, economic, financial, agricultural and scientific. Not being content with researches, advices and grants-in-aid, the Department has even undertaken financial schemes for the rehabilitation of the backward classes of the farm population. In 1934 the U.S. Department of Agriculture opened a rural rehabilitation division " to assist the destitute farm families and other families residing in rural areas to become self-supporting and independent of emergency relief aid." " By April 30, 1940, some 837,000 families had received such loans. Many had lifted themselves out of a hopeless situation to self-respect and honest livelihood. More than 114,000 families had repaid their loans by that date. A survey of 360 thousand borrowers made in December 1939 showed that they had increased their net worth by 26 per cent. and their net

income by 43 per cent. since the coming of the farm administration programme. In addition they had increased the amount of food produced for home consumption from a total value of $54,160,567 to $89,038,910."

This Bureau's latest publication, "Farmer in the Changing World," 1940, referred to above, contains contributions by the officers of the Department. In the treatment of the farm problems of the country they have considered every aspect of the farmer's life. There is a determined and organised effort to uplift every stratum of society and bring it up to the level of normal efficiency. The authorities have defined their duties in the following words :—

"To build an economic democracy that will match our political democracy, our people must have facts. Few agencies have been as persistent in digging out facts as the Department of Agriculture. Its scientists have a long and honourable record in their never-ending quest, and they have added much no human knowledge in the fields that are vital to every one of us.

"The investigations of the Department of Agriculture are not confined to natural sciences under the necessities of modern life—many of them arising out of the revolutionary discoveries of science—the Department has had to pay more and more attention to economic and social problems as well. It has been building up a notable body of knowledge in the fields."

In accordance with these ideals they have undertaken measures of a very comprehensive type. They have started agricultural banks with federal funds, taken measures to sustain prices of agricultural products, and are financing schemes of soil conservancy, electricity to rural areas, land reclamation and utilisation schemes besides many others of far-reaching character.

U.S.S.R.

Then there is the case of the U.S.S.R. The weak and backward Russia of the Czars has been transformed into a mighty nation within 20 years, and this was due to co-ordinated planning in all fields—economic, social and cultural. The recent economic development of the U.S.S.R. provides an inspiring chapter in the world's economic history. The results are due to the high ideals and tremendous force of men at the centre—of men like Lenin, Stalin and others. They reconstituted the whole of the economic system, developed all the natural resources, built up industries, constructed navigation canals which are now the wonders of the world, and adopted measures for

the cultural, scientific and intellectual development of the vast and heterogeneous masses of the Republics. The fight they have put up in this war mainly with their own resources has opened the eyes of the world. These very energies, when directed to social and economic development after the war, may produce results still more far-reaching.

England

Even in England the Central Government has been assuming since the last war responsibility for revolutionary changes in regard to health, social welfare, housing, education and economic development. In spite of the fact that their counties and boroughs are rich and energetic, measures have been adopted by the Central Government to improve the land and the standard of living of the people. Their housing scheme is possibly the most stupendous of their efforts. The Beveridge Plan of social security almost of a revolutionary nature, is being considered and worked out in the midst of a world war. Two Committees have already been appointed to consider Land Reforms and several Commissions on Town Planning, rural life improvements and others are working actively. Their economists are actively engaged on post-war problem of trade, finance and the rehabilitation of continental Europe. The war does not seem to interfere with their developmental programme in any way.

Japan

Similarly, Japan's transition from an isolated island to a world power is an achievement of a centralised and paternalistic administrative control over almost every aspect of the country's economy. The part played by the Government in the industrial development of the country is well known. It may be noted in this connection that three considerations led the Government to take the initiative : firstly, there was lack of individual enterprise in the people who were for centuries subjected to a feudal regime ; secondly, the capital requirements were large and could not be met from private sources ; and thirdly, Japan was a country of handicrafts and the people were not in a position to tackle successfully the new problems of large-scale industry which required administrative skill and experience. "Accordingly, the Government undertook the task of industrialisation . . . It decided what enterprises should be inaugurated ; it established them or furnished the capital for their establishment by private companies ; it encouraged technical and scientific training ; it imported instructors for the new industries from abroad. So im-

portant a part did the Government play in the early days that it has never been able to withdraw from industry. It continues to introduce and to support new industries and is looked up to for assistance if any difficulties threaten."* This assistance is given through a policy of subsidy and protection.

What is said above of industry is equally true in the case of other developments such as in education, communication, transport, mining, shipbuilding and fishery, initiated with a view to creating new avenues of employment. It is also under the aegis of the Government that measures such as extension and intensification of agriculture, reclamation of waste lands and colonisation of the thinly populated parts of the country are undertaken for relieving the pressure of population on land.

Programmes of Indian Political Parties

Before we go on to the concrete steps to be taken by the Central Government to implement this new policy, let us review the programmes of Indian political parties and see what organised public opinion has been demanding in this country.

Of the various political parties in India, the Indian National Congress is the only organisation that has had for many years past a definite programme for rural reconstruction with a definite ideology behind it. The Muslim League has no programme as yet, except for the recent announcement of its President that the League does not want landlords or capitalists. There is, however, no resolution of the League to support this announcement. The Hindu Mahasabha stands for the political rights of the Hindus, and has also, therefore, no economic programme. The Depressed Class organisations similarly stand for the political and social amelioration of their members only.

The rural reconstruction programme of the Indian National Congress has been embodied in two resolutions, one passed at the Karachi sessions in 1931, and the other at Faizpur in 1936.

The Karachi resolution runs as under :—

> "The system of land tenure and revenue and rent shall be reformed, and an equitable adjustment made of the burden on agricultural land, immediately giving relief to the smaller peasantry by a substantial reduction of agricultural rent and revenue now paid by them, and, in case of uneconomic holdings, exempting them from rent, so long as necessary, with such re-

* John E. Orchard. "Japan's Economic Position," p. 79.

lief as may be just and necessary to holders of small estates affected by such exemption or reduction in rent, and to the same end, imposing a graded tax on net incomes from land above a reasonable minimum."

The Faizpur Resolution is more detailed :—

1. " Rent and revenue should be readjusted, having regard to present conditions and there should be substantial reduction in both.
2. Uneconomic holdings should be exempted from rent or land tax.
3. Agricultural incomes should be assessed to income-tax like all other incomes, on a progressive scale, subject to a prescribed minimum.
4. Canal and other irrigation rates should be substantially lowered.
5. All feudal dues and levies and forced labour should be abolished, and demands other than rent should be made illegal.
6. Fixity of tenure with heritable rights, along with the right to build houses and plant trees, should be provided for all tenants.
7. An effort should be made to introduce co-operative farming.
8. The crushing burden of rural debt should be removed. Special tribunals should be appointed to inquire into this and all debts which are unconscionable, or beyond the capacity of peasants to pay, should be liquidated ; meanwhile, a moratorium should be declared, and steps should be taken to provide cheap credit facilities.
9. Arrears of rent of previous years should generally be wiped out.
10. Common pasture lands should be provided ; and the rights of the people in tanks, wells, ponds, forests and the like, recognised ; and no encroachment on these rights should be permitted.
11. Arrears of rent should be recoverable in the same manner as civil debts, and not by ejectment.
12. There should be statutory provision for securing a living wage, and suitable working conditions, for agricultural workers.
13. Peasant unions should be recognised."

It is obvious from the above that the Indian National Congress has appreciated the gravity and urgency of the problem, and has visualised an extensive drive by the State for the relief of the peasantry. In that programme, the reduction of the burden of land revenue and the reform of the tenures so as to abolish the feudal privileges of the landowners occupy a prominent place. Besides, the *charka* movement and the movement for the revival of village industries aim at improving the conditions of life in the village.

The National Planning Committee

When the popular ministries assumed office in 1937, they launched upon extensive measures of tenancy reform and debt legislation in furtherance of the above programme. Further, in order to evolve a well-considered scheme of planning on a country-wide scale, the National Planning Committee was appointed in 1938 under the presidency of Pandit Jawaharlal Nehru, wherein all provinces, some of the leading Indian States and the Government of India co-operated. Various sub-committees were appointed to consider every aspect of Indian life and make suggestions for improvement or reorganisation. Although the reports of most of the sub-committees were ready, the National Planning Committee has had no opportunity of considering them all as a whole as the President is in prison. In the meanwhile, the Secretary has been permitted to print the resolutions unofficially and they are now before the public. They have touched every side of the Indian national life. The basis for the planning is broadly the Soviet model with some modifications for intermediate stages of development.

The resignation of the Congress Ministries and the political tension in the country have led to the shelving, for the time being, of the good work of the National Planning Committee. There is little doubt, however, that when conditions return to normal, steps will have to be taken to evolve a comprehensive national plan. Such a plan need not follow in detail the Soviet model or any other particular model, but it will have to be radical enough if it is to produce any substantial results.

The Industrialists' Plan

That Indian public opinion now desires planning on a big enough scale is also shown by the recent Plan for the Economic Development of India put forward by Sir Purshottamdas and other prominent industrialists envisaging a capital lay-out of Rs. 10,000 crores over a

period of 15 years and covering agriculture, communications, industries and social services. Such a colossal figure would have staggered an earlier generation, but it is significant that while there have been as there should be, criticisms of the Plan with reference to particular aspects of it, the target figures given by them have received general support from all sections of the public. The objective of any such plan must be to raise substantially the standard of life of the masses and this presupposes a colossal effort organised under a Government which commands the confidence of all sections of the people.

EXTENSION OF THE IMPERIAL COUNCIL'S FUNCTIONS

Let us now outline some of the measures which the Central Government has to take to implement the new policy thus envisaged. First of all, the functions of the Imperial Council of Agricultural Research need to be expanded, so as to include within its scope the whole of rural life and work in that sphere. The Council may become a permanent Commission in charge of the whole problem, studying and reviewing land reforms, irrigation schemes, forestry and animal husbandry, education, health, rural engineering, rural electricity, and in fact, all aspects of rural reform. It should work in close co-operation with the executive authority, which we may call the Ministry of Agriculture ; and it should review scientifically the work of other Government departments and policies in their bearing on rural uplift and welfare. It should be responsible for the collection and co-ordination of all statistical data necessary for these diverse purposes, and should be in a position to make substantial grants to Provincial Governments, Universities and other public bodies for the promotion of research work not only in the technical aspects of agriculture, but in all these vital spheres. It is for such a body also to co-ordinate research work and be in continuous contact with all the development work being done by Government and other agencies in agricultural improvements, in the promotion of subsidiary industries, in co-operation, marketing, rural transportation, rural finance, education, nutrition, public health, schemes of land reclamations and afforestation. It should undertake by way of illustration rehabilitation schemes on a comprehensive basis in co-operation with Provinces and States and assist them with funds where similar schemes are undertaken by smaller units.

There will still be room enough for activities by Provincial Governments. Problems pertaining to their regions will have to be investigated and tackled by them. Provincial research institutes will still

be necessary. In fact, the Central Government's success will have to be judged by the extent to which co-ordination and effective direction are achieved without sacrificing local initiative and drive. There is no reason to fear that the Provincial Governments would resent the Central Government's interference, provided such " interference ' is accompanied with the offer of expert advice as well as grants-in-aid for the purpose in hand. As the last link in the chain, there will be the village authorities, official agencies as well as non-official bodies and institutions whose activities will need to be strengthened and revitalised through the three agencies we have recommended elsewhere, viz., the *Panchayat,* the School and the Co-operative Society. Along these lines alone can the vast and intricate problems of our rural life be satifactorily solved, so as firstly to stop further decay and disintegration, and secondly to ensure steady progress in many-fold directions thereafter.

The problem of raising funds for all these developments is discussed further on in this Chapter. Here we may mention that large funds will be necessary in the first instance for setting up the administrative and research machinery, training the necessary personnel, preparing plans and planning surveys prior to launching upon the various concrete schemes of development. For this purpose we may suggest that half the profits of the Reserve Bank accruing to the Government of India should be earmarked for this purpose. There is warrant for thus devoting the Central Banks's profits to agricultural reconstruction work in the practice of the Commonwealth Bank of Australia. For a fuller discussion of this point, reference may be made to the Memorandum on the subject addressed to the Central Government by Sir Manilal Nanavati which is given as an Appendix to this chapter.

(2) Rural Statistics

Planning on a considerable scale with a view, let us say, to doubling the standard of life of the masses within the next, say, 20 years and evolving a balanced economic structure cannot be undertaken without the help of an up-to-date, efficient and comprehensive statistical service. This was realised by Russia at an early stage in the Revolutionary Reconstruction, and it has been realised more and more in the U.S.A., the U.K. and other advanced countries. The inadequacy of Indian statistics, especially of agricultural statistics, is patent. We do not know definitely what our total agricultural production is, and Government Committees have stated that there is no

adequate statistical information to work out with any degree of certainty whether our agricultural production has kept pace with the increase in population. Some of the Indian States send no returns. The data for permanently settled areas are quite meagre. The Department of Commercial Intelligence and Statistics is an outgrowth of administrative needs ; the wider significance of statistics as the basis for solid economic planning has not yet been realised. The agencies employed for the collection of these data are often incompetent, and it is only recently that work on a scientific basis in some fields has been undertaken under the auspices of the Imperial Council of Agricultural Research. We have hardly any data, apart from these recent ones, regarding the cost of cultivation of different crops under different conditions of soil, climate and technique ; we do not know what methods of cultivation are more profitable than others. Nor do we have any precise information regarding the incomes of various classes subsisting on the soil, the incidence of rent and revenue, and the expenditure by different rural classes on necessaries and comforts of life. It is for an expert committee to say how and along what lines these deficiencies could be made up. But, it is clear that here is a vast field for the activities of an expanded Council of Agricultural Research.*

In this connection, we may again refer to the need for a land utilisation survey along the lines of similar surveys in the U.S.A. This subject has already been dealt with in an earlier section. We may only add here that unless we know how the land is being utilised, and should be utilised hereafter, no rational basis for a proper planning is possible.

(3) The Need for a Rural Census

There is also another vital point on which detailed information is essential. We would like to know who are the people who own the land to-day, who actually cultivate the land and on what terms *vis-a-vis* the State as well as the landlord. Figures regarding transfers of land indicate that vast changes in these relationship have been taking place in the country over several decades. Problems like the growth of tenancies, of crop sharing and landless labour demand

* The Statistical Abstract for India, published annually by the Government of India, is a bulky volume, and the Bowley Robertson Report suggested that a desirable change would be to reconstitute the Abstract on the lines of the Year Books of Canada, Australia, New Zealand or South Africa so as to combine a readable account of the changes during the year with summary tables of all important statistics.

It is also desirable that the Provinces and States should compile annual Abstracts for their respective territories : otherwise it is difficult for the public to get a correct idea of the progress made in the various parts of the country. These abstracts can conveniently include subjects which are important to rural economy, such as transfer of land, size of holdings, etc.

urgent attention. But, authentic information on this crucial matter is lacking. This could be made good by a Rural Census, say, once every ten years, which would collect detailed statistics to show the existing position in these respects. It would also enable us later to assess the effects of ameliorative measures and suggest further lines of reform. Such rural censuses were taken in European countries between 1930 and 1933—at the instance of the International Institute of Agriculture—and the results are available to us in the form of monographs issued by that body.

(4) Periodical Conferences

Finally, when these new measures are initiated, periodical conferences of Government departments concerned and the non-official agencies and scientists and administrators from all parts of the country could be called to exchange ideas, to discuss difficulties, and to chalk out further programmes. Such conferences would have also an educative value for the general public. Above all, they are sure to bring out the need for a wide sociological approach to our rural problem which we have stressed here.

It is true that the Government of India have been holding periodically conferences on subjects such as Education, Health, Co-operation, Roads, Irrigation, etc. These deliberations have produced good results. The topics, however, are not correlated and studied in relation to rural requirements. Instead of holding these conferences independently, it would be much more useful if they were held together, the sessions being divided into sections, so as to cover all the aspects of rural life and work.

European Conference on Rural Life

In this connection it might be useful to follow the procedure adopted by the League of Nations in arranging to call a European Conference on Rural Life. In 1937, the League of Nations Assembly resolved that a European Conference on Rural Life should be held in 1939. As a preliminary to this a special committee was appointed to plan the preparation of monographs on Rural Life Problems for the Continental States. The Conference was not held owing to the war, but the monographs prepared and the plan of Conference chalked out are available. The objects of the European Conference were :—

1. To obtain the technical advice of certain international organisations or qualified experts on certain problems of common interest to the rural populations of all European countries ;

2. To collect documentary material giving as vivid a picture as possible of the various forms of rural life in different parts of Europe.
3. To organise between the European countries an exchange of information and ideas, in order to mobilise the experience of all for the benefit of all.
4. To make known the methods adopted in certain countries for the definite purpose of improving the standard of rural life and the results achieved through such methods.
5. To ascertain what difficulties stand in the way of similar progress in other countries.
6. By discussion and example, to encourage the Governments and the general public in European countries to take a definite and continuous interest in all attempts to improve the conditions of life of rural populations.
7. To lay down certain guiding principles applicable *mutatis mutandis*, to all the rural populations of Europe.
8. Finally, to ascertain how the individual efforts of different countries might be supported by appropriate international action.

The information collected for the Conference is something which did not exist for the rural population of Europe as a whole. The monographs prepared contain a description of the characteristic features of the rural life and problems of each country. They give a panoramic view extending from one end of Europe to the other of the daily life of the agricultural workers and of the outstanding differences that may be noticed from country to country and region to region. Indications are given of the directions in which the rural populations seem to be developing ; the tendencies and trends by which they are influenced ; the progress achieved and the improvements still to be made ; the difficulties and the means which seem best adapted for overcoming them.

The synopsis of these monographs includes the following items:—

1. The influence of demographic conditions. Density of the rural population. Relations between urban and rural populations ; state of health, etc.
2. Land tenure system, land settlement, agrarian reforms. Technical improvements in agriculture, designed to raise the standard of life of the rural population. Local, regional and national measures. Soil improvements, crop improve-

ments ; improvement of live-stock ; equipment ; rural industries ; reduction of cost prices, organisation of sales and markets ; grading.

3. Co-operatives.
4. Agricultural credits and insurance against agricultural risks.
5. Education : General, domestic, technical, adult education, Peasant art, peasant culture, folklore.
6. Medico-social policy.

   Results of the recommendations of the European Rural Hygienic Conference of 1932—health centres, collaboration and co-ordination of the action of the public health and relief authorities, of the medical practitioners, of insurance institutions, of mutual assistance associations, health co-operatives and benevolent societies.

   General sudy of certain diseases specially affecting rural populations and rural economy (including alcoholism).
7. Nutrition.

   Study of physical fitness and of the state of nutrition of rural communities (including a survey of actual consumption, a determination of the adequacy of the diets, and consideration of the measures required to remedy any defects of diet noted).

   Special studies on milk and bread.

   Economic considerations.
8. Rural Planning.
   (*a*) Area Planning.

   Transport and communications ; Water supply, sewage disposal ; Electrification, etc.

   (*b*) Community Planning.

   Community centres, cinemas, libraries, wireless, playing-grounds, baths, swimming baths, wash-houses.

   (*b*) Community Planning.

   (*c*) The rural house and outbuildings.

The national monographs drawn up by Governments for the European Conference on Rural Life so far published relate to Yugoslavia, France, Poland, Bulgaria, Hungary, Belgium, Norway, Denmark, Netherlands, Sweden and Finland.

In addition to these the following general technical monographs have also been prepared :

1. Rural Housing and Planning.
2. Recreation in Rural Areas.
3. Intellectual Aspects of Rural Life.
4. Sickness Insurance and Rural Medical Assistance.
5. Land Reclamation and Improvement.
6. Land Tenure Systems in Europe.
7. Government Action concerned with Agricultural Markets and Production.
8. Capital and Income of Farms in Europe.
9. Rural Dietaries in Europe.
10. General Survey of Medico-Social Policy in Rural Areas.
11. Conditions and Improvement of Crop Production.
12. Stock Raising and Rural Industries.
13. Population and Agriculture.
14. Organisation of Technical Instruction for Agriculturists.

Some of these studies were specially prepared by the International Institute of Agriculture, Rome, for the conference. They are studies by topics in contrast to the general regional monographs prepared by the States. Between these two sets of publications one gets a fairly complete view of rural life problems of the countries and these methods adopted for their solution. It is desirable that Indian Provinces and States should take up similar studies on a properly planned basis* preferably under the auspices of the Government of India.

Funds for Rural Development

It has been said that finance is the main obstacle in the way of the fulfilment of such ambitious projects. This has been so in the past. The present war has, however, opened up new possibilities. Finance, during the war, is a camp-follower, not a master. Could it not be made true of peace-times as well? The technique of monetary management has developed greatly during the last two decades. The advanced nations of the world have emancipated themselves from

* The Indian Society of Agricultural Economics has been endeavouring to organise studies similar to those of the Rural Life Conference mentioned above. The Society has drawn up a synopsis on "Rural Life Problems of India", on the analogy of one drawn up by the League of Nations for Europe and arrangements are being made to prepare some studies along these lines for provinces and Indian States. The provincial Governments are at present busy with war work and seem to be unable to undertake the preparation of such monographs right now. Therefore non-official agencies are employed. These studies are not likely to be as comprehensive or as authoritative as they would be if prepared by Governments, especially as it is difficult for non-officials to collect all the information from widely scattered Government reports and records, but they nevertheless should serve a useful purpose.

Similarly, studies by topics are undertaken and one on Land Problems of India is under preparation. Some others will follow in due course.

the tyranny of King Gold. Already schemes of international monetary management and co-ordination of national currency systems are under discussion. The Allies have also realised that the new world order cannot be achieved unless the various national economic systems are so reconstructed after the war as to follow scope for expansion nationally as well as internationally. The British as well as American Plans have in view some arrangements for long-term capital lending, especially to war-devastated countries, for stabilisation of prices of primary commodities through some system of pooling and building up of reserves, for the reduction of tariffs and the return to saner policies in respect of all international transactions. The Hot-springs Conference in Quebec, at which some 44 nations were represented, has had preliminary discussions as to the improvement of food standards all the world over, India will certainly play her part in these reconstruction schemes, consistently, of course, with her prior obligations to her own people whose progress in agriculture and industries has been hampered so far on account of a failure to see problems " steadily, and see them whole." The Atlantic Charter has promised to all men freedom from want, the first step towards which must surely be freedom from starvation.

But to go back to our point regarding the finance for all these development schemes. First of all, as we have said, this is a question of proper monetary management. Ultimately the real source of national income for a country is the amount of land, labour and capital at its disposal. As to the first two, India has vast resources of nature and human material which can be drawn upon. As to capital, it is true that we may have difficulties. These, however, are sometimes exaggerated. As the example of Soviet Russia shows, capital resources can be built up remarkably rapidly, if all the energies of the nation are effectively harnessed to the tasks of reconstruction. The experience of Germany after the post-war inflation has also been similar. It would have been beyond the wildest dreams of experts to say about 1929, that only ten years thereafter, Germany would have resources enough to fight the biggest powers in the world. There is a mutual relationship between employment, income and capital growth which leads to an enhancement of " taxable capacity at each stage." Writers on Public Finance have now even discarded the concept of " taxable capacity." Public expenditure itself generates income and under appropriate conditions, stimulates economic growth. India's capital resources have grown during the last few decades, as is evidenced by the growth of the bank deposits which increased from Rs. 93 crores

in 1914 to Rs. 403 crores in 1942-43 and the growth of capital invested in joint stock companies from Rs. 80 crores in 1914 to Rs. 304 crores in 1939-40. During the last fifty years our net imports of gold have been 46 million ounces. If at least some of these could be mobilised, we should have considerable resources for our immediate needs. Moreover, some portion of sterling assets which we have acquired during the war and which we may acquire hereafter could well be devoted to rural reconstruction. Then, again, the savings to India on account of the liquidation of her external liabilities should make it possible for her to utilise her current trade balances for the acquisition of capital goods. Lastly, a policy of foreign borrowings on suitable terms, avoiding the creation of foreign vested interests in this country could be evolved so as to supplement all these resources. It may only be added here that all this presupposes a proper monetary policy.

It is true that in the post-war period there will be many rival demands on our capital resources, demands from new and old industries, from agriculture and from social services. It will be necessary to see not only that a proper balance is maintained between current consumption and capital accumulation, but also that the capital resources available are allocated between different possible uses, including agriculture and small and large-scale industries so as to bring in the largest returns, measures in economic as well as social values. That, however, is evidently a larger question. For the present, it would be sufficient to observe that there appears little reason to fear a lack of capital prsenting itself as the main problem in the post-war period, if steps are taken simultaneously to utilise our idle resources, natural and human. The problem may on the other hand, turn out to be one of finding appropriate schemes for the right utilisation of our resources and of finding the right technical and managerial personnel. The dearth of the latter is the real explanation of the economic backwardness of India, and herein comes the role of the State. The development of the modern technique in France and Germany in the nineteenth century was the result of the employment of British technique and skill. Russia and Japan modernised their economic systems with the help of foreign experts whose main function was to train up local people. There is no reason why India should not emulate their example.

Conclusion

To sum up, given a properly planned policy on the part of the Government of India a policy aiming at a comprehensive reconstruc-

tion of all aspects of our rural life and at evolving a balanced economic structure, the outlook is by no means unpromising. The vestiges of the old colonial policy, and of the policy of *laissez faire* must now go. So far as our rural problem is concerned, this new policy may be summed up as a bold step forward to reform the land system and to lay down a programme for removing the surplus population on the land and of doing away with rural unemployment : to evolve an efficient and honest system of administration reaching down to the villages ; and to revitalise the life of the villager through the agency of the *Panchayat*, the school and he co-operative society. Such a step forward would, without doubt, enlist the wholehearted co-operation and enthusiasm of all the reformist elements in this country's population.

Each one of these aspects of the new policy is dealt with in the Chapters that follow.

APPENDIX

MEMORANDUM ON ALLOCATION OF THE RESERVE BANK'S PROFITS TO AGRICULTURAL RECONSTRUCTION

By Sir Manilal B. Nanavati

That the productivity of Indian agriculture has been going down and the problem of feeding the growing population of the country is becoming more and more acute does not need to be argued in detail. The food crisis in Bengal and the famine conditions in several other parts of the country have brought out the consequences of this state of affairs. Agriculture which is India's main industry is to-day on a deficit economy and this fact has its repercussions on all aspects of the country's economic life. The continually growing pressure of population on the land and the unchecked de-industrialisaticn of the countryside are at the root of this basic maladjustment which makes agriculture a chronically depressed industry. Consequently the living standard of the bulk of the rural population of India which is 90 per cent. of the whole is very low.

2. We know now broadly what is wrong with our agriculture to-day and what measures are necessary for its rehabilitation. There is general agreement that this is not a matter for piecemeal remedies ; it demands a well thought-out, all-inclusive drive, aiming at a simultaneous and sustained improvement of all aspects of the rural economy. These measures would affect agricultural technique, finance, marketing, tenures and tenancies, rural industries, education, transport, etc., and in fact the basic framework of our life—economic, administrative, political and social. The task is truly colossal—there is no other word for it, though this statement has been made so often that the very word has lost its force on us. All these measures presuppose that the Central Government in India must take charge of the reconstruction measures, it should provide large funds to meet the expenditure and create a suitable Organisation to make use of the funds properly and constructively. Organisation is, however, unthinkable apart from funds, and so, in the last analysis, it may seem that the issue is one of building up adequate funds for all the manifold needs of agricultural reconstruction.

3. Actually, however, it is not a question of funds only. The question of organising the proper machinery of collecting the necessary factual material, of getting together the right type of personnel and of evolving schemes which supplement and complement the efforts in various directions is equally important. Any schemes of reconstruction and development which we may desire to put into force after the war presuppose prior preparation and organisation, so as to give a precise

idea of the magnitude of the task and of the lines along which it can most effectively and expeditiously be tackled. For all this preliminary and preparatory work as well as for execution of projects through suitable agencies according to a well-laid out plan the Central Government must take the lead and give the country necessary guidance.

4. The first and foremost need is clearly for the Centre to take a more active interest in agricultural development. At present it has no department dealing with some of the most important agricultural problems like land tenures and land taxation. The Department of Education, Health and Lands does not deal with rural problems in their totality. Hydro-electric projects are delegated to the Department of Labour. Irrigation and roads are in charge of another Department. Possibly, there is no Central Government in the world which is so ill-equipped and unorganised to handle the vast problem of rural life. The fact that the various Post-war Reconstruction Committees set up by the Central Government, although appointed over two years ago, have not yet started active functioning—collecting the materials and preparing the plans, reveals the weakness of the central organisation. So far it merely thinks in terms of co-ordination or general supervision. All this must change ; the Central Government must take the initiative. It must prepare plans in consultation with Provincial and State Governments, and it must see that these are worked out by the Governments concerned along the general lines chalked out for them. The Provincial and State Governments must, indeed, be entrusted with the execution of these plans ; but it is the Centre alone which can take the larger views so necessary for the working of an integrated programme which would express and symbolise the economic unity of the country.

This is the inevitable conclusion one comes to when one reviews the result of the activities of the various developmental branches of the administration in the country since the inauguration of the Reforms of 1919. This need has been emphasised by the Royal Commission on Agriculture and by Sir John Russell in his Report on the work of the Imperial Council of Agricultural Research in applying science to crop production in India.

In the past, the general policies of the Government of India have been determined in the light of minimum administrative needs, law and order, and the whole structure of taxation and public expenditure has been built up without, regard to the developmental needs of the country. During the present century however, the need for research and improvement has gradually been realised, and the Central as well as provincial Governments have tried to foster these within their limited means. Special bodies have been set up for research and co-ordination work on important commercial crops such as tea, jute, cotton, lac and sugar and the funds necessary for the same have been found from the proceeds of the cesses levied on these. Similarly road construction was stimulated through grants from the petrol cess. The principle has thus been accepted that the work in connection with each particular commodity or service should be financed from funds raised by taxation of that commodity or service at a suitable stage and in a suitable manner. The Imperial Council of Agricultural Research, established on the recommendation of the Royal Commission on Agriculture, is financed mainly from the export cess on agricultural produce, and as remarked above, on the whole within the limitations of the funds available good work is being done under its auspices. However, for agricultural reconstruction in general, there is as yet no adequate provision. The Imperial Council of Agricultural Research concerns itself mainly with technical research. Vital problems, such as those connected with land tenures and finance do not fall within its purview. Nor is there adequate provision for economic research and collection of statistics regarding holdings, irrigation, rural unemployment, etc. The social side of village life is neglected. The Department of Education, Health and Lands, which is in charge of Agriculture also has hardly any staff dealing with agricultural problems. The work of the development of agriculture falls mainly on the Provincial Governments which are faced with increasing expenditure and inelastic revenue sources ; they have neither the means nor the general equipment and outlook necessary for the larger objectives to be realised through planned research and organisational work in the field of agriculture and rural reconstruction. This has led to a neglect of social services which in other countries have altered materially the incidence of real wealth and income for the poorer sections of the community. India's backwardness in the

sphere of public health and education is an instance in point. The recent appointment of a Committee to deal with the former and the recommendations of the Sargent Report on the latter indicate a realisation of the urgency of these problems and there are undoubtedly several other spheres in which work will have to be taken in hand if the post-war period is to witness any significant improvement in our standard of living and comfort.

The far greater success in these fields achieved in U. K., the U. S. A. and U. S. S. R. has been due undoubtedly to the efforts of the Central or Federal Government, Local or State Governments being required to fall in line with the general policy outlined by the Centre. Even in the U. S. A. where the tradition of State autonomy is much stronger and more deep-rooted than in this country, the Federal Government has taken upon itself the responsibility for large projects like the Tennessee Valley Administration and Farm Credit Administration in order to rehabilitate agriculture. It could not be otherwise in this country where a large leeway has to be made up before we can keep abreast of the latest developments in science and technique in advanced countries. The, device to be used for this purpose is the principle of grants-in-aid, so that the Centre can offer advice and assistance at the same time, without destroying or discouraging the initiative and responsibilities of the Provincial Governments.

5. The problem of finding funds for agricultural development is one of the most stupendous which the country shall have to face in the post-war period. New sources of taxation will have to be found. Reconstruction loans will have to be floated. Rural finance agencies will have to be strengthened and systematised. Perhaps, we shall avail ourselves of international plans for long term capital loans to relatively backward countries in need of capital development. We shall also have to consider the possibilities of devoting at least a part of the newly accumulated sterling resources for the provision of the equipment necessary for modernising agriculture. All efforts will, in fact, have to be made to add to the taxable capacity of the people and so to the revenues of the State by fostering a many-sided economic growth, so as to benefit by the well-known " multiplier " effect of investment on employment and incomes.

But apart from these large financial requirements some funds—and they must also be large—are needed to set up an initial organisation to deal with these problems comprehensively. For example, we may have to undertake a detailed Land Utilisation Survey, in the light of which schemes of land reclamation, rural engineering, crop planning, etc., can be formulated. Possibilities of extension of irrigation would have to be studied by experts who may have to be brought over from foreign countries. We should also need to investigate the possibilities of hydro-electric schemes through a hydrographic survey of various regions. There is, in fact, hardly any sphere of agricultural development where such research, investigation, planning and prospecting is not needed. The present administrative machinery will have to be strengthened and expanded even before any of the projects thus approved of are put into execution. Funds must be found for all these, and it would, obviously, be desirable if they could be found outside the annual budget, so that they are available without interference as is the case with the many research bodies mentioned above. It is only then that continuous work can be carried out systematically. Looking to the past experience this fund should also be provided from an assured source so that the organisation that may be created to plan out programme may function systematically and continuously. The first criterion is that the funds should be ample to meet the initial needs and to provide for a few years to come and should be available without interruption. Once this fund has been created the provision of actual development finance may be left to the appropriate Committees to suggest. This latter is a larger question which it is not the object of this Memorandum to go into.

6. In this connection, we suggest that half the profits of the Reserve Bank of India should be set apart for financing the setting up of an organisation for the development of rural life preferably under the Imperial Council of Agricultural Research whose functions should be expanded to make plans, promote research and sanction grants for agricultural reconstruction. The Reserve Bank, it is admitted by all, is a Public Utility, and it is not worked for the profit of the shareholders. Under the Reserve Bank Act, there is already a provision for the limita-

tion of the dividends that can be given to the shareholders. These have hitherto amounted to about Rs. 17·5 lakhs annually since the incorporation of the Bank and even if the dividends are increased they would not absorb any very appreciable amount. The profits of the Reserve Bank over the same period have been increasing as shown in the Table below:—

PROFITS OF THE RESERVE BANK

(In thousands of rupees)

——	Amounts set aside for payment of dividend.	Surplus payable to the Central Government.	Total.
1935 April to December, 1935	13,13	42,93	56,06
1936	17,50	35,92	53,42
1937	17,50	10,41	27,91
1938	17,50	20,95	38,45
1939	17,50	5,00	22,50
Half-year ending 30th June, 1940 ...	8,75	20,54	29,29
1940-41	17,50	2,61,75	2,79,25
1941-42	17,50	3,24,04	3,41,54
1942-43	20,00*	7,49,81	7,69,81

* Including Rs. 2,50,000 of surplus available for payment of an additional dividend at the rate of ½ per cent.

Under the present arrangement, whatever surplus there remains after the allocation to dividends goes to the Central Government, and this contribution is then amalgamated with the general revenues of the country. It is easy to see that if half the profits of the Reserve Bank are constituted into a special fund for creating the necessary organisation at the Centre for the development of agriculture, it would have little adverse effect on general resources which are amply met, while it would be an excellent source of funds so badly needed for the initial very necessary organization. The great advantage of this procedure would be that the organization would be assured of finance independently of the Government budget. The profits of the Reserve Bank come, after all, from the community at large, as they accrue mainly in the Issue Department, and there is hardly any more deserving use of the same than the one suggested here; for, agriculture is India's key industry which has an undoubted claim on such funds, which ought, naturally, to go to the benefit of the large mass of the people. Since half the profits of the Bank would still be available to the Government, that would be more than enough to compensate the Government for their own investments in the Bank. They have invested 5 crores for the provision of the Reserve fund and permit the creation of a certain amount in the currency reserve by way of *ad hoc* Treasury Bills. On non-terminable loans Government pays 3½ per cent. and on Treasury Bills, the average rate is As. 12. On 5 crores of Reserve Funds, Government would be entitled to Rs. 17½ lakhs and on Treasury Bills which would always be a varying factor, it may receive about Rs. 22 lakhs or nearly Rs. 40 lakhs in all. This is a fairly average sum which the Government of India should receive from the Reserve Bank for the use of their funds. For the last three years the profits of the Bank have been increasing and have now no relation to the direct services rendered by the Government of India, whereas half the profits still left over would more than compensate them for this provision of service charge.

The profits of the Reserve Bank are bound to be high for some years to come due to the accumulation of sterling balances. It will take some time to set up and fit the new organisation into working order, while for at least eight or ten years this income will be assured. It may, in the meanwhile, be able to lay aside some amount every year for use later on when the profits fall. If the organisation functions well, there should not be any difficulty in getting more funds.

This suggestion is in line with the policy hitherto followed by the Government of India in financing schemes of development from assured sources and the argument that the profits of the Reserve Bank may not always be as high is no bar to their use along the lines suggested while they continue.

7. The principle that a portion of the profits of a Central Bank be utilised for agricultural development has been recognised in Australia, where 25 per cent.

of the profits of the Commonwealth Bank in the Note Issue Department are paid into the Rural Credit Department, until a total of 2 million has been reached. This amount now constitutes the permanent capital of the Department. There are other ways in which the Rural Credit Department of the Bank is provided with funds to the maximum of £3 million by the Treasury at such rates of interest as may be agreed upon. No such funds have been allowed to the Agricultural Credit Department of the Reserve Bank of India, as its functions are confined to research and guidance to Governments and other bodies.

8. So far as financing the co-operative movement is concerned, the Reserve Bank has been trying to give facilities to Central and Provincial Co-operative Banks in respect of rural finance. There is as yet no adequate organisation which can take full advantage of these facilities, but an organisation can be built up in course of time. For the present, the co-operative movement has ample funds, in fact, more than it can absorb. What is needed is the rehabilitation of the co-operative machinery. In any case, Section 17 of the Reserve Bank Act provides ample facilities for the supply of short term funds to the movement when needed. For long-term finance the Provincial Government's help in the floating of debentures in the shape of a guarantee of interest and capital is adequate to bring in funds at a low rate of interest. For special purposes, such as, the financing of the sale of produce, the Reserve Bank is prepared to find funds at a rate even below the Bank Rate.

The funds made available by setting apart half the profits of the Reserve Bank should, therefore, be first used to create an appropriate organisation to deal with the whole problem, to collect information, to investigate conditions, to frame policies, to give grants when schemes have to be introduced, or to undertake work directly in appropriate cases where more than one jurisdiction is involved and to help the units to obtain funds where local sources are inadequate and thus to strengthen the structure of agriculture.

9. This fund should be entrusted with the Imperial Council of Agricultural Research. With the limited funds left at its disposal it has done good work in stimulating technical research in agriculture in co-operation with the provinces and the States. It has a fine record of useful work. It has a competent secretariat. On its governing body there are men of all shades of opinions—technical experts, experienced administrators, business men with wide experience and substantial agriculturists. On its Council there are technical experts who put up projects, discuss them and recommend them to the Governing Body. There is a happy combination of experts and administrators. Its present functions are limited and should now be extended to inlcude the whole problem of rural reconstruction in its varied aspects economic, social, administrative, technical, engineering, finance, transport, etc. It can function through appropriate Committees. Apart from the two or three Committees working at present the additional Committees for the following problems may be suggested :—

(*i*) Social and cultural life of the people. Problem of health and nutrition.
(*ii*) Finance of agriculture, tariffs and fiscal problems, debt legislation.
(*iii*) Problem of land tenures and taxation, consolidation of holdings.
(*iv*) Rural engineering—civil, mechanical, electrical, sanitary.
(*v*) Rural transport.
(*vi*) Rural administration and propaganda.

Thus the functions of the Imperial Council should be expanded and additional funds made available to that body.

For larger financing of projects it may suggest methods of raising them.

10. On principle, as well as on practical grounds, the above proposals are, in our sincere opinion, a move in the right direction. If the post-war policies are to be given a good shape and an immediate start, this will provide a businesslike method of dealing with them instead of being dealt with by unwieldy Committees with indeterminate recommendations. Nor is it advisable to leave those policies to mere experts either. They must be judged from a practical point of view. Taken by itself, the amount available under the scheme will be small relative to the needs, but it would mean a good beginning. It is possible for Government to take a decision in this matter immediately by the introduction of a suitable

amendment in the Reserve Bank Act, so as to make this allocation a statutory grant beneficial to agriculture. It will also be necessary to amend the Constitution of the Imperial Council of Agricultural Research, so that it may handle the whole of the rural problem. The preliminary work done by the organisation thus set up should prove extremely valuable when, after the war, large projects of agricultural development are taken up, as they must be, in order to increase the nation's standard of life, to raise the productivity of agriculture all round, so as to enable the farmer to enter upon a surplus in place of a deficit economy.

CHAPTER XVII

THE REFORM OF THE LAND SYSTEM

General Principles

Having outlined in the last chapter the general lines along which Government policy has to be reorientated we now proceed to indicate the lines along which the land system must be reformed. The land problem, as we have seen, is the most vital of our economic problems to-day ; for, it is the system of land tenures, tenancies and taxation that determines the economic productivity of the land as an instrument of production and affects the working of the entire social system. No effective scheme of agricultural planning for the post-war period can be thought of which does not concern itself with a reconstitution of this vital aspect of rural life.

In view of what we have said above, it should be clear that the reform of the land system should proceed in three main directions. Firstly, the cultivator himself should have a reasonable size of holding which he can call his own and of which he feels himself master and from which he can get a certain minimum standard of living. Secondly, the burden of taxation he has to bear should be in accordance with his ability ; it should be elastic so as to vary with the climatic and other conditions of the region and with the changes in price levels ; it should also be equitable in the sense that the burden he has to bear should in no case be more than he can bear or higher than that on other members of the community who have purchasing power about equal to his own. This may briefly be expressed by saying that the cultivator needs an equitable and elastic system of land taxation. Thirdly, it is necessary that a well-thought-out scheme of developing rural industries should be put into operation so as to remove the surplus population on the soil and to raise rural incomes. These three reforms are essential if the rural economy is to be placed on a sound footing. This is not to suggest that the duty of the State is exhausted if these changes are made. There are uncertainties and

hazards incidental to the farmer's occupation, due, for example, to failure or bad distribution of rainfall or the attacks of pests and animal and plant diseases. Measures to minimise these have to be taken along the lines already suggested in the course of this study. It is hardly necessary to reiterate that the State has also to help besides bringing under the plough as much land as can be reclaimed and extending to the utmost limit facilities for irrigation, by providing suitable facilities for finance and marketing so as to ensure to the cultivator a fair price for his product. Then again, in matters of education, sanitation and public health, the State has a responsibility not only to the peasantry but to the entire citizen body. Our object in stressing the three points mentioned above is only to bring out more clearly what appear to be the minimum essential requirements of the farmer to-day which the Government should attend to. Moreover, we wish to stress the fact that all these other measures of reform or State aid to agriculture cannot produce the desired result unless the land system is reformed along the lines suggested here.

In regard to the first point, we have seen already how unsatisfactory the present position is. As much as 70 per cent. of the total area under cultivation is cultivated by non-owners ; the owners are absentee landlords with no economic functions or justification ; tenancy is increasing ; rents are high ; alienation of land is proceeding apace ; and, the business of farming has become uneconomic and unremunerative. Attempts at scientific improvements of agriculture have not borne the desired fruits. Conditions have gone so bad that it is not possible to make the zamindars or landowners take a real interest in their lands. The enquiries made by the Bengal Land Revenue Commission have shown that not only in Bengal, but also in the Punjab, Madras and U.P. except for a very small percentage, the landowners as a class, be they called zamindars, taluqdars or malguzars, have become mere rent-receivers, interested in nothing beyond the collection of rents, or their share of the produce. Even in a ryotwari area like Gujarat, landlords seldom take interest in the actual work on the field. In some cases, they sink a well or make casual advances to the cultivators, but that is about all. Rents are determined competitively, and where crop-sharing prevails, the landlord gets as much as half the total produce without having to make any contribution at all. If the cultivator belongs to one of the lower castes, rents are particularly high, and if he is in debt, the landlord and the sowkar—the two may even be one person—take away the whole crop, and the accounts are settled later on in the course of the year.

The divorce of ownership from management is a characteristic feature of modern industrial organisation, but there the implication is that the managers are specialists and experts, so that this division of functions works out to mutual advantage. In the case of the land system, the task of management, such as it is, and risk-bearing fall on the cultivator who is least capable of shouldering it ; the landlord becomes only a *rentier*. We have thus the worst of both of the worlds. Piecemeal tenancy legislation has proved futile ; feudal levies and impositions still continue ; measures to check alienation of land to non-agriculturists and to reduce the burden of debts have also borne little fruit. What is needed is a frontal attack on the whole system, a change in the entire basis of land ownership and cultivation. As one ponders over the problem, one feels more and more that a revision of the land system is the first vital step necessary. As R. H. Tawney, an undoubted authority in the subject, observes : " Improvement of agricultural methods is, no doubt, indispensable ; but it is idle to preach that doctrine to cultivators so impoverished by the exactions of parasitic interests, that they do not possess the resources needed to apply it. In the Europe of the nineteenth century, the reconstruction of the legal fabric of the land system preceded the modernisation both of productive technique and of the business side of farming ; nor, in the absence of the first, would the two last have been possible."*

The above remarks refer to China, but they are applicable to India as well. In China as in India, only 35 per cent. or so of the land is cultivated by owner-cultivators, the rest being worked under tenancy. In his programme of reform, Sun-Yat-Sen had placed land reform in the forefront, and the soundness of the same has been reinforced by other authorities as well. The Annual Report of the Bank of China for 1935 observes : " The system of ownership is the foundation of rural economy, and unless the problem of agrarian reform is satisfactorily solved, the various constructive activities proposed for the improvement of agricultural situation will be superficial and have only a limited value."†

THREE POSSIBLE LINES

There are three possible lines along which a solution could be attempted. First, one could think of a transformation of the land system along the lines of the Agrarian Revolution of the latter part of the eighteenth century in England, a transference of land from

* " Agrarian China " Introduction, p. *xviii.*
† *Ibid.*, p. vii.

the small owner to the capitalist landowner of substantial means : a substitution of estate farming for small-scale peasant farming. This process was the spontaneous outcome of several new forces that affected economic life in England in that period ; a similar process was also witnessed in Prussia and in parts of France during the nineteenth century. Could we advocate such a transformation in India ? Apart from the ideological issues involved in this choice, there are obvious practical considerations which preclude such a solution. First and foremost, we know that attempts to create a landlord class in India similar to that in England have failed in the past, and there is no reason to expect that our experience would be at all different hereafter. A capitalistic transformation of agriculture presupposes commercial farming, whereas the keynote of our agriculture is, and must remain at least for a considerable time to come, subsistence farming. Then again, there is the question of reabsorbing the large numbers who would necessarily have to be displaced if such a policy is put into practice. In England, the process involved great hardship and injustice, and the decay of the yeomanry was lamented not only by poets and visionaries but also by practical reformers. It would be quite undesirable to reduce vast masses of people to the position of hired labourers working under the supervision and control of private capitalists, or even joint stock companies. Such an attempt would provoke grave discontent and opposition. Under our present conditions, there may even be a further difficulty. It may not be possible to get a sufficient number of capitalists to invest in land and lock up their capital for a pretty long time in permanent improvements, since agriculture is not likely to be as profitable an investment as trade or industries. It may be possible, indeed, that in a few cases, estate farming may be desirable and practicable in India as, for example, in the case of hitherto uncultivated land which may have to be brought under the plough at considerable cost. No dispossession of existing interests would be involved in this case, and the State may decide, after due enquiry, that the best interests of all would be served if capitalists with large resources were allowed to develop these lands and work them on an economic basis, subject, of course, to the option of the State to purchase them back after a certain period on terms which may be laid down. It may also be desirable to investigate in this connection the possibilities of profit sharing so as to give the small cultivators a stake in the proceeds of farming. These, however, are special cases, but for the country as a whole, a general transformation along large-scale capitalistic lines is not a practical proposition.

Another solution that suggests itself is whole nationaliation to be followed by the institution of large collective farms as in Soviet Russia. Here, again, the question is one involving ideological issues, and it has to be answered not merely with reference to land alone, but with reference to the ownership of all means of production. It is not for us in this study to assess the relative merits and demerits of different system of economic organisation or of different sets of ideals of individual and collective life. These are large issues on which, we have already mentioned, there is room for differences of opinion, especially because of the difficulties of transition from a capitalistic to a socialistic order. Whether ultimately and in the long run, the interests of society require a socialistic or communistic ordering of economic life and institutions, we need not stop here to discuss. Our object is to indicate the minimum that seems necessary and practicable here and now. It is for that reason, therefore, that we purpose the third alternative outlined below.

That alternative is a reconstruction of the land system so as to make the cultivator the owner of his holding, the creation, in other words, of a system of peasant proprietorship in the country and the establishment of a direct contact between the cultivator and the Government. Even this is by no means a simple task. The problem is, in fact, colossal ; for, it involves an attack on vested interests. The merits of peasant proprietorship have been recognised all the world over, and the agrarian reforms in several European countries during the last century had in view the creation and extension of peasant proprietorship, so as to secure a stable and balanced economic and social system. We shall review these briefly in the following paragraphs.

European Land Reforms

The report on the Land Tenure Systems in Europe prepared for the International Institute of Agriculture, Rome, divides Europe into three principal zones :—

I. " The land settlement zone, in which the evolution of land tenure has been progressive (Western and Northern European countries) :—

(a) the four principal countries : U.K., France, Germany and Italy ;

(*b*) the five northern countries : Belgium, Holland, Denmark, Norway and Sweden, to which Switzerland may be added.

II. The zone of agrarian collectivism introduced by revolutionary means, namely, the Union of Soviet Socialist Republics ;

III. The agrariàn reform zone, including all Central and Eastern European countries.''

Land settlement, which has been put down as characteristic of the first group is defined as " the creation of new undertakings and the extension of the area under cultivation, mainly by the allocation of lands owned by the State." " It is the most moderate way of transforming a country's land tenure system but it is also a long-term type of agrarian reform, which only gradually changes the distribution of landed property."* Agrarian collectivism which characterises the U.S.S.R. is, on the other hand, a complete breakaway with the past. " The Muzhik has become a member of the collective farm while the former large estates are now State farms, established on communistic lines after the 1917 Revolution."† In between these two extreme types, we hear the third group mentioned above comprising the Central and Eastern countries. In this type of land system, " the principle of ownership has been preserved, but some infractions of the rights of private individuals could not be avoided." The extent of changes thus introduced vary as between the different countries in this zone or group. Let us review these briefly with reference to each zone.

I. *England.*—The land reforms in U.K. since the last quarter of the nineteenth century aim at counteracting the earlier trend towards the concentration of land ownership and holdings in the hands of a few by encouraging the growth of smaller holdings. In spite of all these legislative measures, the British land system is one of the larger holdings. Some two-thirds of the land is worked on lease, but most of these leases are held by the same farmers throughout their lives. The proportion of the land worked directly by the owner rose in England from 10.6 per cent. in 1913 to 20 per cent. in 1921 and to 36 per cent. in 1927.‡ The system of entail which prevails over a large part of the country has been an effective bar to sub-division, so that the problem of consolidation or reintegration has not arisen at all. The case of British agriculture is, however, almost a class apart in view of the highly industrialised character of the country and its vast

* "Land Tenure Systems in Europe," p. 8.
† *Ibid.*
‡ *Ibid*, p. 14.

colonial possessions which can be depended upon to supplement the production of the home country substantially. Nevertheless, the re-organisation of British agriculture is one of the keenly debated problems of the day, and the State is practically committed to a policy of playing an increasingly more active role in directing and controlling agricultural production. Sir Daniel Hall, reviewing the position of British agriculture, lays down in a recent work* the main criteria of a new policy as the State purchase of all agricultural land, the elimination of the private landlord, the supply of capital by the State and the institution of an Agricultural Development Corporation to carry out the new policy with a proper plan behind it. In a matter like the reconstitution of the land tenure system, there can, indeed, be no question of copying literally one system, or the other, but the point to note is, as Sir Daniel Hall puts it, we should not "allow ourselves to be daunted by the fear of big decisions."†

France.—France is well known as a land of small peasant proprietors. The object of land tenure reforms has, therefore, been to increase the size of holdings. This has been sought to be done through amicable exchanges and consolidation as also through legislative checks preventing the partition of holdings below a certain limit. It is noteworthy that tenant farming has declined of late, and about 60 per cent. of the cultivated area is worked by the owners. The following table shows the progress in this direction between 1892 and 1929 :‡

—	Percentage or number of undertakings.		Percentage of area cultivated.	
	1892	1929	1892	1929
Direct working ...	70	75.5	53	60
Tenant farming ...	23	20.0	36	30
Metayage	7	5.5	10	10

Tenant farming is still an important feature of French agriculture, but the rent is not always a sum of money fixed for the duration of the lease, but is determined by the current money value of a fixed quantity of wheat or other produce, so that the risk due to fluctuations in prices is shared between the landlord and the tenant-farmer.

* "Reconstruction and the Land," (1942), pp. 171*ff.*
† *Ibid*, p. 277. *Cf.* "Without the bold decision to purchase the agricultural land for the country none of the measures for the regeneration of farming will be feasible, except at the cost of presenting landowners with a great bonus and with the power of hampering all reform of methods."
‡ "Land Tenure Systems in Europe," p. 18.

Germany.—The German system of land tenure stands half-way between the English and French systems. Large estates predominate in Eastern Germany, whereas in Western Germany small holdings are more important. German agrarian reforms have aimed at the breaking up of large estates. Small peasant holdings are entitled to special legal protection. Direct working of land by the owner is the common practice. Between 1907 and 1933, such area increased from 83.6 per cent. to 88.7 of the total area, whereas the proportion of land under tenancy decreased from 12.6 to 10.7 per cent. in the same period. The changes introduced in the other countries in this zone need not detain us here.

II. We may now glance briefly at the Russian system after the Revolution of 1917. Under the new system, two principal forms are recognised, collective farms (Kolkhozi) and State farms (Sovkhozi). The former are formed by joining up a number of peasant holdings so as to constitute fair-sized units. The land thus reconstituted belongs to the peasants " in unlimited usufruct," and is given to them rent-free, and is cultivated on a co-operative basis. On the State farms, there is complete collectivisation. Work is carried on according to plans drawn up by the State, and the labour employed is subject to regulations drawn up by the State. These farms are a model for technical improvements and thus serve a valuable educational purpose. The Soviet agrarian laws have thus completely transformed the basis of agriculture in Russia.

III. A word now about the third group mentioned above, viz., the agrarian reform zone. The agrarian laws passed in the various countries in this zone have varied in scope and extent, the reform in some countries being more radical than in others. But in all cases, the general principle has been that " the basis of every nation must be the peasantry, and that the latter's welfare depends upon the distribution of the soil which its members till."* The result has been to transform the agrarian structure of the countries concerned. As the report we have been drawing upon sums up the position : " The formation of a class of peasant proprietors is of fundamental importance in the social and economic regeneration of these countries ; and it is in this connection that the profound historical significance of the agrarian reforms arises."†

The following table shows the present position in regard to direct working of the land by the owner in certain European countries :—

* "Land Tenure Systems in Europe," p. 44*ff.*
† *Ibid.*, p. 71.

	Percentage of area under direct working by the owner to the total area cultivated.
France	60.0
Germany	88.7
Italy	57.5
Hungary	85.0
Netherlands	51.0
Switzerland	80.0
Estonia	72.4
Latvia	89.4
Czechoslovakia	90.0

The above figures may be taken to imply the consensus of opinion among agrarian reformers in favour of creating conditions such that the owner himself cultivates the land without the intervention of intermediaries.

The measures taken by various European Governments towards this end may be summarised as follows :

(*a*) Buying up of big estates and setting up of small cultivators thereon ;

(*b*) Putting restrictions on the transfer of land ;

(*c*) Imposition of low rental so that landowners who do not cultivate may have no incentive to hold the lands ;

(*d*) Financial assistance to tenants to buy land ;

(*e*) Creation of non-attachable farm properties ;

(*f*) Prohibition of attachment or division of properties by the declaration of the owner to the judicial authorities that the said properties are 'family' properties ;

(*g*) Preventive measures against the division of land on succession ;

(*h*) Reclamation of waste lands and the release of Government-owned lands for cultivators.

Along with these reforms, there has been a widening of social services, such as education, health services, etc., so as to improve general living conditions.

The Position in India

In India, the Government have always been reluctant to undertake any such comprehensive reforms. Pressed by their own officers, British and Indian, they defended their land policy in 1902, but there has been no review of the same since then. The question of reform-

ing the land tenure systems was excluded from the scope of the Royal Commission on Agriculture's work. The appointment of the Bengal Land Revenue Commission and the Madras Land Estates Act Committee by the popular ministries under the new constitution has led to a revival of interest in the problem, especially with reference to the Zamindari system. The majority of the Bengal Land Revenue Commission have recommended the State purchase of landlord's interests and the replacement of the Zamindari system by one which would bring the cultivator into the position of tenants holding directly from the Government. The Madras Committee have come to the conclusion that cultivators should be declared to be owners of the lands, but, strangely enough, they recommended that the zamindars should be recognised as revenue collectors on behalf of Government, rents being fixed at the level prevailing in the year preceding the Permanent Settlement of 1802.*

Immediate Reforms

It would perhaps be too much to attempt to lay down any general solution immediately applicable to all parts of India. There are diverse economic and social factors to be taken into account. A reconstruction of the legal basis of economic relationships is not a matter that can lightly be undertaken. A wholesale purchase of landlords' rights by the State is a matter of time, and it raises difficult issues of policy and administration. We would, therefore, advocate that while the aim of Government policy should be to create peasant proprietorship all over the country by recognising the actual cultivator as owner, this should be done over a period of years, after due enquiry into the conditions of ownership and cultivation possibly by way of a rural census such as has been suggested earlier. The Land Revenue Commission of Bengal, and the Land Enquiry Committees of Madras and the Punjab have placed valuable information before us in respect of these Provinces. Similar enquiries should be made in all Provinces and States. These would reveal the weaknesses of the land revenue and tenure systems as nothing else would. It would then be possible to devise measures that would stand on surer ground. As far as possible, these enquiries should be conducted on uniform lines so that all pertinent questions are considered simultaneously and an all-India land policy framed in the light of the same.

It would appear that the best procedure thereafter would be to appoint special Land Commissioners in each district or a group of

* Report, Part I, pp. 256-7.

districts to deal with the question. These Commissioners should take due note of local conditions ; they should watch and regulate the transfers of land in their areas, the extent of sub-division and fragmentation, and the methods of rent and revenue collection. In view of all these factors, they should, by judicious mixture of persuasion and legal sanction, as the occasion demands, safeguard and promote the interests of the cultivator and help him, firstly, to consolidate his own plots, and, secondly, to acquire the plots contiguous to his own if that is necessary for efficient and economical cultivation.* At the same time, some measures of primary importance may be suggested for immediate adoption.

A. *Zamindari Areas*

First, in regard to the zamindary areas, including Taluqdari and Malguzari, the State should deal with the actual cultivator and collect land revenue from him directly. The landlord need not be expropriated. Only, the State should take over the landlord's functions and pay the landlord a fair rent for the land, deducting therefrom the expenses incidental to the discharge of these duties. Later on, when the State is in a better position, this may be commuted into a lump sum payment and the landlord's claim thus finally extinguished. For the immediate present, the link between the landlord and the tenant should be broken ; the landlord should thereafter have no interest in the land. He would get a certain fair rent in view of his legal ownership, but he would have no other claims. It is possible that in many cases the landlords would be glad to have such an arrangement. Tenancy legislation has hitherto failed just because the claims of absentee landlords have been recognised and in spite of all attempts feudal levies and charges have not disappeared. Once the State deals directly with the cultivator, even agreeing to pay to the landlord a fair rent, the various illegal exactions now levied from the tenant will disappear ; socially, he will be emancipated, and, for the first time, the peasant will feel the joy of freedom and also the responsibility of individual initiative. Thus, the first step in this scheme of land reform is for the State to establish direct contact with the

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*** A more detailed treatment of this problem of reconstituting holdings has been given in Part II above.**

The Government of Baroda has formulated a scheme, which has been approved of and is financially assisted by the Imperial Council of Agrilcultural Research, for village rehabilitation combined with resettlement of dispossessed cultivators. Certain villages of the State have passed into the hands of money-lenders and it is proposed that the State should buy the land back from the money lenders and settle on it the original cultivators. It is proposed to try the experiments in four ways: (a) in one village the cultivator will receive consolidated holdings; (b) in another, the State will treat the whole village as a Government farm and the cultivators will work as wage-earners on a profit-sharing basis; (c) in a third village collective farming will be attempted; and (d) in the fourth, farming will be carried on on a co-operative basis.

actual cultivator and to eliminate the feudal control of the landlord by making him the recipient of a fair income in view of his legal title.

B. *Non-Zamindari Areas*

Even with the abolition of the Zamindari system—permanent or semi-permanent—landlordism of another kind would remain. Under both the systems, as we have seen before, more and more land is passing into the hands of the non-cultivating holders—whether they be statutory agriculturists or otherwise. Land is the main means of investment for the bulk of the successful cultivators or moneylenders or other tradesmen, who do not take interest in cultivation but are more rack-renters.*

(*a*) The needs of the situation would be met by a legislative control of rents at a certain multiple, a small one, of the land revenue. This would be an effective check on absentee landlordism and speculative investment in land by persons who have no real interest in farming.

(*b*) Thereafter, the problem would be to check the transfers of land from cultivating to non-cultivating classes and to encourage as far as possible a reconstitution of holding towards a more economical size.

Transfer of land without showing sufficient cause to the authorities, such as, the Land Commissioners, or the Collectors in charge, should be prohibited. For example, if a cultivator is leaving the village or taking to some other profession or has more land than he can conveniently manage, his land could be allowed to be transferred. But, if the transfer is by way of payment of debt, it should not be allowed. Various restrictions on moneylending and other legislations on the compounding of old debts have in many cases reduced the borrowing capacities of uneconomic holders and therefore there is nothing revolutionary in this suggestion. Exceptions may, however, be made in the case of co-operative societies and land mortgage banks who may be permitted to hold lands received in the liquidation of their dues. A condition may be attached to these transactions that land acquired by them should be sold to *bona fide* cultivators, especially those who are likely to consolidate their holdings by the acquisition.

* *Cf.*, "So far as agriculture goes, it is tempting to find a common origin for many of its problems in the immense social value attaching by custom and tradition to the mere possession of rights in land. This helps to obstruct the formation of rational units both of tenure and of cultivation, and thus to increase the dependence of the peasant on the moneylender and the middleman. It also tends to increase the capital value of land out of reasonable proportion to the annual value of its produce, and thus to encourage excessive borrowing. Perhaps also it helps to account for the fact that the contribution of the large-landlord class, where it exists, to agricultural organisation, and improvement does not seem to have been impressive as compared with its rent-roll or with the contribution of similar classes in other countries." Bowley and Robertson, Report on a Scheme for an Economic Census of India, pp. 63, 64.

(*c*) Special facilities should be granted to *bona fide* cultivators to acquire land so that they expand their holdings and consolidate them and turn them into economic ones according to the standards fixed for the locality ; long-term loans may be given to them free of interest or at a nominal rate. A condition should be attached to such acquisitions that the consolidated holding should not be sold or partitioned without the consent of the Land Commissioners of the locality.

(*d*) Land Commissioners should have power to acquire land held by non-cultivating owners—owners who have not cultivated the land for three years and more—and give it on long instalments to *bona fide* cultivators in the adjoining area. This method may be profitably used when large estates are held by big zamindars and are used for rack renting.

(*e*) Non-cultivating zamindars should be liable to income-tax as any other traders.

(*f*) Special facilities should be given to cultivators who want to consolidate and rearrange holdings possibly on a more liberal scale than hitherto.

(*g*) Measures may be adopted to stop fragmentation beyond a certain limit for various kinds of lands.

(*h*) A simple law of pre-emption should be applied in the sale of lands.

These and many other types of legislations may be undertaken in accordance with local conditions. Only the wider problem of creating economic holdings which would involve a change in the laws of inheritance or which would involve displacement of labour would have to be taken in hand gradually as rural industries develop so as permanently to absorb this labour. The whole trend of legislation should be such as to make it unprofitable for any but the actual cultivator to hold land.

Land Commissioners

This would be a big programme and it cannot be managed by the ordinary District Revenue Staff. We have, therefore, suggested that the best procedure would be to appoint special Land Commissioners in each district or group of districts to deal with special development questions including that of land. They should be in charge of land for public purposes and other development activities of the area—public works, organisation of village *panchayats,* technical developments in agriculture and such other functions. The ordinary Revenue Staff is overburdened with routine of administration but if the

Collector could be relieved of some of his routine duties, he should be the proper person to manage this business, assisted by the District Engineer and the Settlement Superintendent, who may form the Land Commissioners. Their functions should be wide and they should be assisted by a specialised staff. The Indian rural problems are very complicated and unless a specialised agency is created, they cannot be managed systematically and adequately. Under present conditions the functions of the District Staff are limited and it all depends upon the personality of the District Officer as to what interest he takes in these developmental functions. What is wanted is a specially trained staff that would not be burdened with routine and would be able to take quick decisions. The present Land Revenue Regulations are conceived in a narrow spirit intended to deal with the situation of a static society. If large measures of land reform and industrial development are to take place, the whole business of Government would have to be organised and run on an entirely different spirit. The new administrator will have to be a person with an entirely different attitude and outlook and combining, in a unique manner wide, understanding and also detailed technical knowledge.

Possible Objections

It may be urged that the creation of peasant proprietorship along these lines will only perpetuate an inefficient system ; for, after all, these small cultivators have neither the means nor the technical knowledge for making the best use of the land. There is force in this condition. But it should be clear by now that we do not contemplate a mere change in the land system unaccompanied by other appropriate changes. In fact, proper provision of finance, marketing facilities and, above all, technical training is an inevitable corollary of these reforms. The problem of finding alternative occupations for landless labourers or supplementary occupations for small holders must also be taken in land at the same time. In this field, as in others, comprehensiveness must be the keynote of all reforms, a point which sounds otiose, but has nevertheless to be emphasised repeatedly as it has been overlooked hitherto. Moreover, special attention would have to be paid at the problem of raising the efficiency of agriculturists. At present, there are several classes of cultivators, belonging to the lower castes, who are not fitted to be good agriculturists by tradition or upbringing. Such, for example, are the *Bhils* of Gujarats who were formerly a military class but have now been compelled to turn to the land. The same is true of the *Thakerdas* and *Rajputs* of Gujarat.

The former would probably prove good factory hands ; the latter however, they are just misfits. Agriculture cannot prosper so long as the land is in charge of such classes, with no aptitude, training or resources. Some of the artisans who have taken to agriculture because of the decay of their traditional trades are also indifferent agriculturists and mostly ill-equipped. The aim of Government policy should be to see that all these classes are absorbed in industries in the towns or in the rural areas and in other professions. As we know from experience, the thrifty and industrious Kunbi in Gujarat or the Jat in the Punjab could be depended on to make a good use of the facilities offered to him. A long-range policy of fostering peasant proprietorship should aim at aiding and strengthening these types, inculcating in them the practice of co-operation so as to evolve gradually a system of co-operative farming such as has proved a great success in European countries. But, undoubtedly, co-operative farming will need time to take root, as the peasantry to-day is simply averse to such co-operative work.

The Reform of Taxation

As regards the second problem raised in the opening paragraphs of this section, viz., the reform of the tax system, only a few salient points may be touched upon here. The problem of taxation of land is part of the wider problem of public finance, and is intimately connected also with the theory of public expenditure. The main criteria of a sound system of taxation, the ability of the taxpayer, economy in collection, elasticity as to procedure as well as equity in incidence are applicable to incomes from land as to all incomes. In the early days of British rule, the excessive dependence on land revenue made it necessary for the State not only to pitch the revenue demand high initially and to raise it from time to time, but also to put up with, even encourage implicitly the high exactions of the landlord from the tenant. This was the only way to place the financial burden of the administration on the least vocal classes of the population. Now these other sources of revenue have been discovered, a redistribution of the tax burden is imperative. There is now no escape from a policy of revising land taxation in conformity with the principles of the income-tax, including the exemption of incomes below a certain minimum and introducing the principle of progression. At present, the tax on incomes from and apart from land rent is in force in Assam and in Bihar. Some other Provinces have also been considering the question of taxing agricultural incomes and expert opinion is in favour of the

same. Thus, the Punjab Land Revenue Committee, while discussing the imposition of an extra charge on the larger landowners, observed : " The one most consonant with modern methods of taxation would be to levy a special tax upon agricultural income, which is exempt from ordinary income-tax. This has just been done in Bihar, and if this were done in the Punjab, the income-tax system would furnish the necessary analogy and model. Each landowner would be separately assessed according to whatever rates were imposed and assuming rates graduated according to his income, his non-agricultural income would presumably be taken into account for determining the appropriate rate."* The Bengal Land Revenue Commission too recommended a tax on agricultural incomes† and the Government of Bengal has already announced a Bill for this purpose. The provinces need more expanding and elastic sources of revenue for their growing needs by way of nation-building activities. It may not be possible immediately and at one stroke to exempt all uneconomic holdings from taxation, but the present burden can be considerably lightened by increasing the yield from land and making agriculture a more paying proposition. In fact, as agriculture becomes more and more a sound business, and as rural incomes increase, the Provincial Governments should be able to readjust the system of taxation. But that is not all. The question has to be looked at from the point of view of the entire burden of taxation, taking all forms of taxation together. It is well known that hitherto apart from the great increase in direct taxation during the present war, the whole system of taxation in India has been sharply regressive. The enhancements in income-tax, and the imposition of the Excess Profits Tax have materially altered the incidence of taxation recently, but this is only a temporary phase. At the end of the war the problem would again have to be considered seriously how to make the tax system as a whole progressive. This aspect of the question is also linked up with the tariff policy, and there is surely a case for a thorough examination of our fiscal policy in relation to the incidence of tariffs and excises. The reform of land taxation has thus to be viewed with reference to the whole system of taxation and public expenditure, and equity demands that just as small holders earning less than a certain minimum should be exempted, large landowners having large incomes should be made to pay their due to the public exchequer. The main argument against agricultural

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* Report, p. 80.

† "There appears to be no legal bar to the imposition of an agricultural income-tax and we concur with the view expressed by the Indian Taxation Enquiry Committee that agricultural incomes should not be exempted from taxation," (Report, p. 63).

income-tax has been that such a tax would be passed on to tenants in the shape of higher rents, but there need be no such fear if rents are restricted to a definite multiple of the land revenue and the State deals directly with the tenants as suggested above.

Rural Industries

Finally, all these measures of land reform must go hand in hand with attempts at reducing the pressure of population on the soil by finding alternative avenues of employment for the surplus population in rural industries. This topic forms the subject-matter of the next chapter.

CHAPTER XVIII

SURPLUS POPULATION AND RURAL UNEMPLOYMENT

An essential part of any scheme of reform of the land system must be the removal of the pressure of population on the soil so as to diminish rural unemployment and underdevelopment and to arrest the diminution in the size of holdings which are at present a drag upon the productivity of agriculture. In view of what we have already said about the trends of population and food supply, and the low yield of agriculture, it is hardly necessary further to stress the urgency of this problem to which attention has been repeatedly drawn by several competent authorities since the Report of the Famine Commission of 1880. The continued pressure on the soil, the growth of the rural proletariat and the resulting low standard of rural incomes are indicative of a serious rupture of economic equilibrium. The decline in the number of dependents on industry from 46 million in 1901 to 34 million in 1931 and the rise in the man : land ratio from 191 to 245 during the period are indicative of a serious state of affairs. It is difficult to say what amount of population should be removed from the soil so as to make cultivation more economic, but it may roughly be put at about 30 per cent. of the total population now engaged in agriculture.

Over-population

By way of analysis, it has often been suggested that the root cause of this malady is over-population, implying thereby that the fault lies with the people themselves or, at any rate, with the social environment. Without going into nice questions regarding the precise

definition of over-population or the exact nature of the indices in the light of which alone the degree of over-population can be estimated, it may be said at once that this line of reasoning is not fruitful at all. Assuming that the Indian population is growing or tends to grow too rapidly, absolutely and/or relatively, are we in a position to control the rate of growth ? This question is obviously complex ; the rate at which a population grows is the resultant of economic, biological and sociological factors, only a few of which are under man's control. It is, therefore, necessary to take the present population and the estimated rate of growth as just *data* when we are thinking of the not too distant future. Moreover, the problem is more tractable from the production end than from the population end, and few will doubt that in view of India's vast potential resources what is necessary is to have more production—as also equitable distribution through a more judicious use of our resources. The problem, in other words, is to alter the present lop-sided occupational distribution with its excessive concentration on agriculture to a more balanced distribution which would increase the numbers employed in industries, large and small, and services and professions.

The Problem in Europe*

This problem of surplus population is by no means peculiar to India. It had to be faced in most European countries at a certain stage of economic development. Let us see if the experience of such countries can provide us any useful lesson. During the nineteenth century the population of Europe (including Russia) grew rapidly. From 188 millions in 1800, it ncreased to 266 millions in 1850, 401 millions in 1900 and 505 millions in 1930. The comparatively high rate of increase in Europe is shown by the fact that whereas the population in European countries increased between 1870 and 1930 by 198 million or 64 per cent. that of India increased by 88 million or 31 per cent. during the same period. Several methods were devised in these countries to avoid maladjustment in the national economy. There were, in the main, four planks in the policy framed by the several Governments towards this end, viz., (i) raising the level of production from land through intensive cultivation, (ii) assisting large-scale industrialisation which would absorb the surplus popula-

* This section is based on information available in the monographs relating to the Continental countries prepared for the European Conference on Rural Life (1939) and published by the League of Nations. The following books have also been consulted :—(1) "The Northern Countries in World Economy," published by the Delegation for the Promotion of Economic Co-operation between the Northern Countries ; (2) "The Balkan States : A Review of the Economic and Financial Development" ; and (3) "Southern Eastern Europe," the last three being publications of the Royal Institute of International Affairs.

tion ; (iii) providing lands for settlement to the new generation by larger estates and by reclaiming uncultivated marsh lands and heaths ; and (iv) miscellaneous measures directed to raise farm incomes.

(*i*) *Intensive Cultivation.*—Measures taken to encourage fuller utilisation of the soil were comprehensive and every aspect of cultivation was taken into account. To begin with, the methods of tillage were improved and made more efficient by adjusting them to the requirements of the native soil, climate and other environmental conditions. By introducing lupins and other leguminous plants, by making supplies of synthetic fertilizers more abundant and cheap, by instituting systematic rotation of crops and deep tillage of soil, fertility of the lands was increased and even restored in the case of lands that had fallen into disuse. Extensive irrigation works were undertaken with a similar end in view. Importation of new species, varities and breeds of crops and improvement of indigenous ones further helped to raise the quality and quantity of agricultural output. Mechanisation, though not as rapid and widespread as in the United States and Canada, was pursued as far as the size of holdings could permit—the general tendency being to have only such machines as were suitable to small-scale farming. Thus in France—decidedly a country of small holdings—the farmers, between 1862 and 1929, increased their seeds from 11 thousand to 322 thousand, reapers from 9 thousand to 1,388 thousand, harvesters from 9 thousand to 480 thousand and reapers and rakers from 6 thousand to 739 thousand. Mechanisation was made more effective by providing adequate facilities for technical education in agriculture not only in elementary and agricultural schools, but also by organising agricultural lectures and meetings ; the whole agricultural industry was thus sought to be placed in the hands of people with the character, outlook and equipment of the true farmer. As an illustration of the benefits from these several measures, we might note that while Europe produced only 10 quintals of sugar per hectare* a century ago, it is able to produce as much as 50 quintals to-day. In Germany, the gross return of irrigated lands has gone up by R. M. 200 per hectare while in Poland the average increase of crops resulting from these improvements and drainage works has been 30 to 40 per cent. in the case of cereals and leguminous crops and 50 to 60 per cent. for market-garden crops. The Governments of these several countries also provided instruction and other assistance to facilitate these improvements and gave financial

* 1 hectare=2.4711 acres.

aid in the form of loans and subsidies where improvements involved considerable outlay, as in the case of costly fertilizers or the construction of drainage works.

(*ii*) *Industrialisation.*—Some figures regarding recent industrial employment may be given to show how industrialisation has been resorted to in Europe in recent years for taking over the surplus population from the land and maintaining a balanced economy. Between 1907 and 1925, the percentage of industrial workers to total workers went up from 35.8 to 38 in Germany ; between 1911 and 1921, it rose from 24.2 per cent. to 27 per cent. in Denmark, from 10.6 per cent. to 12.8 per cent. in Finland, from 34.2 to 36 per cent. in Holland, from 25.1 to 30.2 per cent. in Sweden. Even during the post-depression years, these countries made rapid strides in industrial development. Taking the employment in 1932 as 100, the index of employment in industry had risen within 6 years to 200 in Germany, 180 in Estonia, 161 in Poland, 153 in Hungary, 151 in Denmark, 142 in Italy, 141 in Finland, 137 in Norway and 117 in Holland. For the whole of Europe (excluding Russia) the index had gone up to 140 by 1938. It is because of this industrial development that the percentage of people engaged in agriculture shows a decline in many European countries. Thus, between 1885 and 1925, the ratio of agricultural population to total population in Germany fell from 42.2 per cent. to 30.5 per cent ; between 1910 and 1920 it declined from 22.5 to 19.1 per cent. in Belgium ; in Switzerland from 46.3 per cent. to 40.7 per cent. and in Holland from 28.4 per cent. to 23.6 per cent. During the period 1870-1930, the proportion of those engaged in agriculture and allied pursuits in Sweden declined from 82.4 per cent. to 56.6 per cent. in rural areas and from 72.4 per cent. to 39.4 per cent. for the country as a whole. Similarly, during the second and third decades of the present century, Norway brought down the ratio of agricultural population from 39.5 per cent. to 29.9 per cent. and Denmark from 46.5 per cent. to 30.3 per cent. But for this provision of alternative means of livelihood, agriculture in most of these countries would have been over-burdened and " packed " as is the case in India to-day.

(*iii*) *Land Reclamation, Redistribution and Extension of Cultivation.*—Provision of lands to the landless agriculturists and to small-holders by breaking up unwieldy estates and by bringing new lands under the plough was another important device adopted to assure an adequate standard of living to the growing farm population. The breaking up of the larger estates and parcelling them out among small

farmers and landless workers started mostly after the war when the problem of unemployment became grave owing to the disbanding of armies. The chief significance of this reform lay in the fact that the operating farmer was made the foundation-stone of the plan. Countries like Estonia, Latvia and Lithuania resorted to almost complete liquidation of large estates. In Estonia where there existed formerly 1,149 estates with an average size of 2,000 hectares each, covering about 52 per cent. of the area cultivated, the number of holdings, after redistribution, went up to 89,000. As a result of these measures, the percentage of owner-operated farms to total farms increased and was as high as 72 in Estonia, 84 in Latvia and 89 in Lithuania with the average size of holdings in these three countries at 11.50 hectares, 22 hectares and 10.20 hectares respectively. Poland, Rumania and Czechoslovakia, Yugoslavia and Italy formed another group of countries where the large estate owners were not expropriated but fairly extensive reductions in their estates were effected and the lands appropriated were parcelled out. In Poland, by 1939, 2.7 million hectares of land were thus redistributed as a result of which 502,000 "dwarf" holdings were brought to the standard size while 600,000 peasants obtained land through parcelling. In Rumania, the lands held by such large estate owners were reduced from 8 million hectares or 40 per cent. of the total area to 2.3 million or 11 per cent. of the total area under cultivation. Similarly, in Czechoslovakia the lands worked by proprietors themselves were extended to 90.8 per cent. of the cultivated area. In Italy thousands of landless peasants were helped to become small proprietors and in 1937, the area distributed amongst them was nearly 6 million hectares. A third group of countries comprising Greece, Belgium, Finland, Great Britain, Germany and Hungary resorted to far less radical measures. Here lands were secured for allotment through purchase by contract or through the exercise of State rights. Belgium in this way helped to settle 100,000 peasant families which had little or no land before, and, by 1937 placed nearly 97 per cent. of the area under direct cultivation by the owner. In Hungary about 500,000 hectares of land were thus redistributed as a result of which 410,000 farmers got land to cultivate. The law was reinforced by a fresh measure in 1936 and within two years, Government parcelled out 20,000 more hectares amongst farmers. Generally, the proprietors who were dispossessed were given compensation by the Governments and the new proprietors were allowed to reimburse the authorities by paying the price of the lands in

convenient instalments. Yet, cases were not wanting where " even the objective of the State to grant an appropriate compensation to the dispossessed, which had been formerly universally recognised, was either not admitted at all or not fulfilled in practice."*

These reforms and improvements have brought about a complete transformation of the traditional agrarian structure of these countries. In Europe as a whole, the passing of about 20 million hectares from the hands of the estate-owners into those of small agriculturists has absorbed thousands of landless peasants, since these small holdings provide work for between twice and three times as many persons per unit of area as large undertakings.† After re-parcelling the area already under cultivation amongst the small-holders many Governments made further efforts to claim waste lands and to encourage settlements thereon. As a result, land reclamation which formerly was mostly to rid the area of malarial infection now assumed the aspect of land utilisation with definite economic and social aims of creating conditions of life which would assure the surplus population a stable and peaceful existence.

Reforms of this magnitude could not have been possible but for the initiative and help from the Governments, which directly undertook this developmental activity and established special organisations for this purpose, of which the *Wasser-und Bodenverbande* (drainage and land consortia) of Germany, the *Wateringues* of Belgium, the Land Reclamation and Land Improvement Consortia of Italy and the Land Drainage Co-operative Societies of Poland are typical. Finance presented a difficult problem as the investments had to be huge while returns were low and began only after a lapse of some years. Different methods were adopted by the several countries to overcome this difficulty. In some, funds were supplied directly by the State while in others they were supplied by banks or by the social insurance institutions or by some special bodies which undertook to finance these operations. In Poland, special credit certificates or improvement bonds were sometimes issued ; these bonds being based on real property, were widely recognised as sound investment, particularly because they were often State guaranteed ; occasionally, the necessary funds were raised by means of taxes, the proceeds of which were earmarked for the purpose. Where this work was undertaken on a small scale by private individuals singly or in association, Governments

* Prof. C. Von Diezte : "Proceedings of the Fifth International Conference of Agricultural Economists," pp. 126-7.

† "The Land Tenure Systems of Europe," International Institute of Agriculture, p. 71.

granted loans at concessional rates or even non-repayable subsidies. The settlers were to repay the Government the price of land in instalments spread over a number of years.

It is interesting to review this work done in the small countries of Europe. Denmark which had at one time more than one-fifth of the total territory lying waste as heaths, reclaimed more than half of this area during the second half of the century; by 1938, nearly 70 per cent. of the waste lands were won over for cultivation and it was hoped to bring all the remaining area under cultivation by an annual draining of some 5,000 hectares. In Belgium, over 56,000 hectares were reclaimed since 1926. Greece recovered an equally extensive area of humid soils to accommodate her refugees. In Finland, about 139,000 hectares of marshlands were drained to facilitate land settlements since 1919 and in Czechoslovakia, 325,000 hectares were reclaimed mainly by land drainage work. Lithuania brought into use 75,000 hectares of heath land which were thereafter transformed into 3,753 holdings of 20 hectares each. Earnest attention was paid to reclamation in Italy only after 1928, but within 10 years the total area in which reclamation was carried out amounted to 5.7 million hectares of which 4.8 million were public works and the rest conducted by private individuals and subsidised by the State. Even France, where the problem of over-population has never presented itself, added 110,000 hectares to her cultivated land in this way.

Thus, conversion of marshes, swamps and heaths into cultivable areas has provided means of living to thousands of families in Europe. The Pontine marshes of Italy are a good illustration. In this area of 77,000 hectares the population at one time numbered hardly some hundred persons and that too only in the summer months—sheltered in miserable huts and exposed to all the risks of malaria. Now, in this very area, there are 5 towns and 17 rural centres ; the land is covered with 3,000 farm-workers' dwellings and 2,600 farms and the population has risen to 60,000 workers and settlers.*

The benefits from intensive combined with extensive cultivation have been undoubtedly high in all these countries. The level of productivity in the zones of reclaimed lands in Italy has risen—the average output of wheat per hectare from 10 to 30 quintals and that of maize from 10-20 to 30-40 quintals and even more. As a result, the value of these lands has gone up from 2,500 lire per hectare to

* "Land Reclamation and Improvement in Europe," (League of Nations) p. 87.

13,000 lire in the North and from 5,000 lire to 26,000 lire per hectare in the South. A similar policy of land utilisation in Germany has raised the value of gross return from these lands by R. M. 350 per hectare. Figures in respect of the total increase in the production of food-crops in the Northern countries—Denmark, Finland, Iceland, Norway and Sweden—show that the production of all cereals in these countries which averaged 7.4 million metric tons a year during 1926-30 rose to 8.6 million metric tons in 1935. The average yield per hectare also showed a marked improvement even in this short period, —wheat of 8 per cent., barley of 12 per cent., rye of 18 per cent. and all cereals of 11 per cent. These figures reflect the benefits which have accrued to these countries from both extensive and intensive cultivation.

(iv) *Miscellaneous Measures : Consolidation of Holdings, Co-operation and Rural Industries.*—One of the main obstacles which the Governments encountered in their efforts at land improvements was the excessive sub-division and fragmentation of holdings. Hence, most of these countries undertook to eradicate this evil by various methods of encouragement and financial help. Consolidation of holdings was the general device adopted while, in some countries, the uneconomic holdings were also enlarged by making use of the expropriated parts of the larger estates for this purpose. Thus Switzerland started consolidation work in 1885 and consolidated about 6,700 hectares. While the law did contain an element of compulsion, voluntary consolidation was encouraged by exempting consolidated properties from the State Land Tax. Poland consolidated, during the period 1919-1937, nearly 800,000 holdings covering an area of 4.9 million hectares. In France, the total area under holdings below 1 hectare was reduced from 1.3 million hectares in 1892 to .7 million hectares by 1929 while the area under the medium-sized holdings of 10 to 50 hectares was increased from 14 million to 22 million hectares ; between 1919-29, nearly a million plots of land were exchanged for this purpose, the total area consolidated under these operations being 700,000 hectares. In most of these cases the exchanges were effected at the expense of the State while in others, they were put through by the owners with some assistance from their Government. Yugoslavia by 1935, had carried on consolidation over an area of 292,000 hectares. In Germany this reform had covered over 382,000 hectares. How far consolidation alone helped in increasing the output is reflected in the fact that, as a result of these measures Germany, from 1933 to 1936

obtained an increase in gross return amounting to the equivalent of nearly 96,000 hectares, reckoning at 25 per cent. the increase in yields in the areas consolidated. Preventive measures were taken in France, Germany, Switzerland, Estonia, Poland, Czechoslovakia, Rumania and Yugoslavia, where restriction of varying degrees were placed on free division of land among the heirs.

Once the farmers were provided with lands for cultivation, the co-operative machinery was put into use for raising the projects in agriculture. Organisation of co-operative associations was encouraged not only to secure finance for the agriculturists but also to reduce the costs of production and to improve the quality of agricultural production through mutual help. With a view to increasing the farm incomes, industries subsidiary to agriculture, such as livestock and dairy industry, sheep-breeding, poultry-farming, forestry, etc., were encouraged. In France, for instance, the total yield from milk was raised from 68 million hectolitres in 1882 to 130 million hectolitres in 1937 while the amount of meat produced at home was increased from 480 million kilogrammes in 1862 to 942 million kilogrammes and this development of the livestock industry has naturally raised the farm incomes of the country. Avenues for employment were opened by pursuing a policy of afforestation in some countries like Finland and France, so as to create subsidiary establishments of paper mills and saw mills in rural areas. Other industries such as sugar-beet refining and distillery, cheese and leather manufacture and oil-pressing were also encouraged and assisted for this purpose. A notable example of progress in this direction is provided by Hungary where incomes from the major agricultural industries such as sugar refining and milling is to-day nearly as much as the total income from agriculture alone. In addition, several rural crafts such as linen-making, lace and embroidery, carpet making, etc., together yield about 30 per cent. of income from agriculture.

These are some important devices whereby Europe has been keeping in chains the spectre of over-population. Little progress in this direction would have been possible for these countries, had not the respective Governments assumed their due share of responsibility and taken the initiative and given assistance in these developmental activities. What weighed with these Governments was not the financial aspect of the projects but the well-being of the people which was at stake. And though, for a time, huge sums had to be expanded on these activities, in the long run, the State was bound to be repaid as

the higher level of incomes enabled the people to contribute more to the State Treasury. The following facts regarding the extent of heath-land cultivation in Denmark are noteworthy in this connection. "Whereas from 1860 to 1928 the population increased by 25 to 35 per cent. in the rural areas known as the islands... from 1904 to 1916, the proceeds of the land tax in the rural departments of the islands increased by about 40 per cent. Similar results were achieved in the other heath-land areas. Investigations made in 1930, covering 620 large and small holdings on heath-lands . . . show that the taxes paid to the State and to the communes in 1930 by the farms amounted to 156,551 crowns ; before reclamation, they amounted to 25,288 crown only These same farms now pay taxes higher than the subsidies which the Society for the cultivation of heath-lands receives from the State for developing the work of reclamation."*

I. Industrialisation in India

That little has so far been done in India by way of intensive agriculture or the encouragement to subsidiary and small-scale industries is obvious. The various schemes of agricultural improvement as well as of rural reconstruction have, as we have seen in Part II, produced meagre results, partly through faults in conception and partly through defective execution. But it may be asked, has not industrialisation proceeded fairly rapidly, especially during the last three decades ? Is not this growth of large-scale industries a factor reducing the surplus on land and raising incomes all round ? Let us survey our industrial progress briefly.

Early Period.—The contrast between the Industrial Revolution in England and the slow transition in India has often been commented upon. While in the former case, there were evils of transition due to an unsetting of the old economic arrangements and habitual modes of work and living, all this was more than compensated for by the greater productivity of the new methods and processes in agriculture, commerce and industry, which soon raised the *per capita* income of the people to a level almost undreamt of before. The social problems created by the new regime of industrialism were also sought to be solved by way of State legislation. In England, Germany as well as in U.S.A. industrialisation solved the problem of a rapidly increasing population, anxious not only to maintain but to improve the existing standards of life. Employment, incomes and capital grew at an accelerated rate, and for a time, at any rate, it appeared that the

* "Land Reclamation and Improvement in Europe," European Conference on Rural Life (League of Nations), pp. 20-21.

Malthusian devil had been chained and the age of plenty had at last dawned. In India, on the other hand, industrialism came to us as a by-product of our political relationship with England and its character and pace were determined by the needs of expansion of the industries in that country. We may skip over here the period of the East India Company whose policy was one of extending its commercial gains even at the cost of indigenous industries. Monopolistic companies, having a charter from the State, were the recognised instruments of the old mercantilist colonial policy of European nations in the seventeenth and eighteenth centuries. They faded out as commercial capitalism gave place to industrial capitalism which demanded an entirely different technique of handling colonial countries. By the forties of the last century, Britain had more capital than she could profitably invest at home, and the appropriate policy needed was to encourage the building up of some industries in colonial countries which could not only yield good profits on the investment, but could also play a part in opening up the interior to such trade and commerce as was necessary for the " home " country. This meant the introduction of railways and the building up of a system of shipping, banking and insurance which would ensure a control of the strategic points in the economy of the country politically subordinate. A variety of factors thus combined to implant in India in industrial system which was not linked to the needs of the indigenous population, but was merely an outgrowth of the peculiar political connection between England and India. There was no question, therefore, throughout the nineteenth century of a proper policy of developing Indian industries, and a crude misunderstanding of the *laissez faire* and free trade doctrines in England gave a theoretical backing to a policy of indifference and apathy, a policy which, while it prolonged the evils of the economic transition in this country, had, incidentally, the advantage of being just suitable to the needs of the expanding export industries at " home." In Western countries, the introduction of railways meant a rapid increase in the demand for coal, iron and a number of engineering and heavy industries, which, in turn, became the foundation of a well-developed many-sided industrial system. In India, on the other hand, almost upto the beginning of the Great War of 1914, no thought was given to the problem of a proper Government policy in respect of industrialisation.

It is true that the Famine Commissions of 1881 and 1901 had emphasized the need for the development of industries in India in

order to reduce the increasing pressure of population on the soil and that Lord Curzon had set up in 1905 a Department of Commerce and Industries at the Centre. But, it was only after the war of 1914 broke out that Government woke up to the need for action in this matter, and appointed the Indian Industrial Commission to assess the possibilities of industrialisation and the ways and means of State aid for the same. Hitherto, even the material for such judgment was lacking. That Commission brought out clearly the vast potentialities of India's resources and made a number of useful suggestions regarding State aid to industries, industrial training and education, and the organisation of industrial departments. But the tariff question was outside the purview of the Commission ! And so, India had to wait for another decade before a new fiscal policy could be evolved. The Reforms of 1919 transferred industries to the Provinces and thus reduced the responsibility of the Centre in this vital matter as also in the case of agriculture, but the Fiscal Autonomy Convention of 1921 and the report of the Indian Fiscal Commission of 1922 opened up a new era in industrial development by means of a policy of protection to nascent industries. In fact, therefore, it is only after the last war that we can talk of a State policy in India in respect of industries.

The beginnings of modern industrialism in India are, however, to be traced to the middle of the nineteenth century. The first permanent cotton mills, the first jute mills, the first railways and the first considerable coal mining date from the period 1850-55.* The opening up of the Suez Canal in 1865, the rapid construction of railways after the sad lesson of the Mutiny and the import of machinery on payment of low or no duties were factors which stimulated industrial growth. It may be noted, however, that the only Indian-owned industry of this period was the cotton textile industry ; as to the rest, the ownership and management were foreign. Even as regards the cotton industry, the controversy regarding the cotton excise duty in the nineties is a well-known illustration of the interference of Lancashire interests in Indian industrial policy, so that the State in India could take little credit for the development of industries upto the last Great War.†

Since the Great War.—The Great War stimulated the cotton and jute industries. The most significant development of this period was,

* Buchanan : "Development of Capitalistic Enterprise in India," p. 136.

† "Ever since India was ordered to abolish her customs tariffs in 1875, it has been in the main in response to Lancashire pressure that the successive readjustments of this policy have been introduced "—Lord Curzon, quoted by Buchanan *op. cit.*, p. 465. Buchanan also mentions an attempt on the part of Dundee interests to restrict the manufacture of jute in India which, however, failed because of the tough resistance offered by the Scotch manufacturers in Calcutta.

however, the foundation of the Iron and Steel industry at Jamshedpur, an example of Indian enterprise, initiative and management, whose subsequent history has amply justified the enthusiasm, interest and pride shown by the Indian people in this new venture. This industrial growth was reflected in a change in the composition of imports and exports. Thus, the imports of articles wholly or mainly manufactured which formed 76.7 per cent. of the total imports during the pre-war quinquennium slightly declined to 75.9 per cent. for the period 1919 to 1923-24, while the corresponding figure in respect of exports showed a rise from 23.3 per cent. to 27.3 per cent.

The two main problems of the post-war were the entry of Japan into Indian markets and the growing strength of Indian nationalism, both of which strengthened the demand for protective tariffs in the interests of rapid industrialisation. The first industry to receive protection under the policy enunciated by the Fiscal Commission was the iron and steel industry. Thereafter, cotton, sugar, paper, matches, and several other industries have been granted protection. The conditions of this policy of discriminating protection were rather stringent, and there was no room under this scheme for the starting of new industrial ventures with the guarantee of protection straightaway. This was a serious handicap. On the whole, however, the period after 1924 has been one of considerable progress, as will be seen from the following table indicating increase in output from the date of grant of protection to 1937-38.

Industry.	Unit.		Year protection was given.	Output.	
				In the year protection was given.	1937-38.
Steel	Tons	(000)	1924	163.2	660
Cotton	Million yards.		1926-27	2,250	4,084
Sugar	Tons	(000)	1931-32	159	931
Paper	Cwt.	(000)	1925	660	1,025.27

It is possible to argue that industrial progress would have been more rapid under a bolder policy of protection and State assistance in other ways. Unfortunately, during this period, India, like other countries, had to weather the Great Depression which started in 1929. The deflationary currency policy of the Government of India since 1925 has come in for a great deal of criticism in this connection, and it has been argued that the link with sterling since 1931 has meant an indirect subsidy to British exports at the expense of Indian industries. The introduction of Imperial Preference " within protection " under the Ottawa Agreement has been another feature of our fiscal

policy which has also been subject to criticism, so that there is a feeling among business men and industrialists that the Government policy taken as a whole is yet half-hearted and halting. Despite of these hindrances, there has been considerable industrial progress in recent years, particularly under the stimulus of the war. The annual steel production in British India is now about 1.2 million tons and that of pig-iron, 1.8 million tons. The country produces 96 thousand tons of paper a year and the annual production of cloth is about 4,500 million yards or more than 80 per cent. of the total requirements of the country. The glass factories now meet half the requirements of the people and more than 75 per cent. of the drugs formerly imported are now manufactured within the country itself. Internal production of cement and matches has displaced all foreign imports. In respect of sugar, India is not only self-sufficient but also the largest producer in the world. All told, India ranks eighth among the industrial countries.

But the fact remains that Indian industrial development has so far not been commensurate with the extent of the country's resources or the rate of population growth. It is now nearly 40 years since the Departments of Industries were set up in some of the more progressive Provinces but in none of them do we find any action taken to exploit the mineral and other resources for industrialisation on a planned basis. The total coal resources of the country are estimated to be about 60 thousand million tons but the annual production is only 28 million tons or one-tenth of what Great Britain produces annually. There are deposits of the richest kind of iron ore amounting to about 3,600 million tons but the production is less than 2 million tons a year. India's manganese deposits are the largest in the world and the country possesses three-fourths of the world's reserves of mica. There are also large deposits of aluminium ore awaiting exploitation while large-scale production of power alcohol from molasses and of producer gas from charcoal to make good the deficiency of petrol has yet to be undertaken. The level of consumption in the country remains low ; there is room even for the expansion of consumption goods industries in the country as the purchasing power of the people increases. The main deficiency in industrial development is the absence of capital goods industries. For vital supplies like machinery, plant, heavy chemicals, electrical goods and apparatus, engineering goods, motor cars, locomotives, ship, aircraft, etc., India remains dependent on foreign supplies. On the whole, the characterisation of India as a

country exporting mainly raw materials and foodstuffs and importing manufactured goods remains true, as is evident from the following table of imports and exports from 1936-37 to 1939-40 :—

(Rs. in lakhs.)*

	IMPORTS.			
	1936-37.	1937-38.	1938-39.	1939-40.
1. Food, drink and tobacco	11,15 (8·9)	21,87 (12·6)	24,00 (15·7)	35,29 (21·3)
2. Raw materials and produce	19,42 (15·5)	40,94 (23·5)	33,18 (21·1)	36,11 (21·9)
3. Articles wholly or mainly manufactured.	92,40 (77·3)	1,08,06 (62·2)	92,77 (60·9)	91,81 (55·7)
4. Machinery of all kinds	14,78 (11·8)	17,98 (10·3)	19,72 (12·9)	15,37 (9·3)
Total imports ...	1,25,24	1,73,78	1,52,34	1,65,27
	EXPORTS.			
1. Food, drink and tobacco	40,23 (20·6)	41,16 (22·8)	39,14 (24·1)	39,64 (19·9)
2. Raw materials and produce and articles mainly manufactured	1,02,54 (52·1)	81,45 (45·0)	73,22 (45·0)	86,03 (42·3)
3. Cotton, raw and waste	45,17 (23·2)	29,77 (16·4)	24,67 (15·2)	31,05 (15·2)
4. Articles wholly or mainly manufactured.	49,82 (25·5)	55,27 (30·6)	45,47 (29·2)	76,05 (37·3)
Total exports ...	1,95,12	1,80,92	1,62,77	2,03,99

The outbreak of the present war once again raised high hopes, for it was felt that here was an opportunity for India to make up the deficiencies in her industrial structure and also to make a great contribution to the Allied war effort by serving as the arsenal of the East. The visit of the Roger Mission, the creation of the Eastern Group Supply Council and the visit of the Grady Technical Mission served to emphasize the part India could play during the war if only suitable steps were taken to develop certain industries. The war has certainly stimulated the old-established industries. The value of war contracts placed in India upto the end of October 1942, has been put at Rs. 428 crores, in addition to the work done in the various ordnance factories now started in different parts of the country. India is now said to be producing 90 per cent. of her war requirements, and supplying to other theatres of war large quantities of arms and ammunition. Large orders have also been placed with cottage industries which have thus benefited by the increased industrial activity in the country. The

* Figures in brackets indicate percentages to the total.

point, however, is, nothing has been done to make good the deficiency in Indian industrial structure due to the absence of capital goods industries. The Grady Mission's report has been shelved ; no active steps have been taken to help Indian industrialists to build up these industries. On the contrary, the proposals made by Indian industrialists in this direction on their own initiative have been turned down. It appears, on the whole, judging from the available indices of industrial production in the country, that this sharp increase in Government orders has meant a considerable drop in production for civilian needs.* It is evident from this survey that in the post-war period India will have to plan her industrial as well as agricultural development in terms of a much more extensive effort, bearing in mind all the while the need to have a proper plan and policy affecting all aspects of economic life.

Apart from these deficiencies in our industrial structure, what concerns us more here is the extent to which such industrial progress as there has been has helped to stimulate employment and raise the general level of incomes. The following table shows the increase in the numbers employed in large-scale industrial establishments since 1921:—

Year.	Number of workers in large industrial establishments (million)	Percentage to the total working population.	Percentage to total population.
1921	1·56	1·70	·50
1931	1·57	1·02	·41
1939	2·08	1·20	·54

This total may be compared with the annual increase of population which works out at between 4 and 5 millions. It is thus obvious that large-scale industries, however rapid their development and however great their expansion, cannot possibly absorb the growing numbers of the population and help further in reducing the already existing surplus population on the land. Moreover, as these industries are necessarily urban, they benefit the countryside but little, except by way of an increased demand for raw materials for industries and for food from the large city populations. This indicates the limitations of large-scale industry so far as the Indian situation is concerned. India needs more industries ; some of them, like the basic industries, will have to be on a large scale and will naturally grow about cities and towns, but, our goal must be to multiply small and medium-scale industries in rural areas, if we are to solve this problem of rural unemployment and under-employment.

* Andrew J. Grajdauzev : "India's War-time Economic Difficulties," *Pacific Affairs*, June , pp. 189-205.

The Case for Small-scale Industries

The real type of industrialisation that we can visualise for India is one which would suit the two special characteristics of India's economy, viz., (1) relative abundance of labour as compared to capital ; (2) a large volume of unemployed and under-employed persons. The first characteristic implies that upto a certain point, the cruder methods of production may have to be preferred to technically more advanced or rationalised methods. The second characteristic makes it obvious that India's need is not for substituting the machine for the hand-worker but for developing rural industries which would not supplant labour so much as supplement it and increase the worker's income, even though on a modest scale. This is illustrated by the following table* relating to the manufacture of textile fabrics in India by four different methods of production.

Method of production.	Capital investment per head of worker.	Output per head	Ratio	Amount of labour employed per unit of capital.
	Rs.	Rs.		
1. Modern Mill ... ... (Large-scale industry)	1,200	650	1·9	1
2. Power Loom ... ... (Small-scale industry)	300	200	1·5	3
3. Automatic Loom ... ... (Cottage industry)	90	80	1·1	15
4. Handloom ... ... (Cottage industry)	35	45	9·8	25

Thus, lower capital intensivity which implies cruder methods of production has the advantage of larger employment of labour per unit of capital. A gradual capital-intensification and a progressive use of more advanced methods would, indeed, be necessary for raising industrial incomes. This change-over will have to be slow in the initial stages if too much social stress is to be avoided. The tempo of industrialisation will have to be so planned as to keep a balance between higher *per capita* output and larger employment.

Moreover, there is also the point that centralised production along highly capitalistic lines leads to unequal distribution and it is possible to argue that if we count in all the costs of overcrowding, slums and other hazards and drawbacks of this system of production the economies of large-scale production and concentration are to some extent counteracted by these " external " *diseconomies* which do not enter into the supply price of the products of these industries. This, indeed,

* The *Eastern Economist*, July 23, 1948, article entitled : " Cottage Industries and the Plan".

may be the significance of Gandhiji's statement that the greater productivity of large-scale industries is partly due to the indirect subsidisation of the same by way of provision of social services in towns by the State, the municipalities and other bodies. In any case, few will doubt that, firstly, our need is specially to foster medium-scale and small scale industries, worked by electric power, wherever possible so as to evolve a diversified industrial structure suited to the needs of the people and their capacity to bear initial cost ; and, secondly, there is need for developing such cottage industries as can be combined with agriculture so as to fill up the idle time of the villager. And, thirdly, we should not forget that some of the existing rural industries and handicrafts must be helped to become more efficient and more paying, for, while we talk of creating new industries, we should not forget that in order to find employment for the agriculturist all the year round, it will be necessary to lay special emphasis on processing industries allied to agriculture along the lines of the Walchandnagar and Revalgaon estates,* and on subsidiary industries which could be combined with small-scale agriculture without much loss of efficiency.

Rural Reconstruction Centres

In this connection, it is necessary to draw pointed attention to the excellent work being done in the Rural Reconstruction Centre at Martandam under the initiative and supervision of Dr. Spencer Hatch.

According to Dr. Hatch,† a rural reconstruction scheme needs at least a dozen cottage vocations so that it may be possible for every man and woman in the village to select an occupation for the leisure hours after his or her own liking and equipment. In accordance with this principle, he has introduced at Martandam a number of subsidiary industries such as basket and mat making ; thread and coir rope making ; hand weaving (including all processes of preparing, sizing ; dyeing and bleaching yarn) ; preparation of tamarind ; growing pineapples and cashewnuts ; making palmyra *gur* and umbrellas ; manufacturing *kuftgari* links and pendants, etc. For youngsters handicrafts have been started which involve less strain, such as, making of Christmas cards and fans from palmyra leaves ; preparation of lacquered articles such as candlesticks, boxes, games and toys ; fret-work and net-making for tennis and other games. Boys and girls of the poorer sections have taken keen interest in these self-help activities and, not unoften, have been responsible for bringing their parents into

* See Chapter IX above.
† "Further Upward in Rural India," pp. 66-111.

this rural rconstruction programme. Every effort is made to extend the benefits of this scheme to the poorest sections of the community. For instance, to enable such people to join the poultry farming organisation, quality eggs for breeding purposes were given free or at a nominal cost to those who were earnest. As a result, the Martandum Poultry Co-operative Society has become a successful organisation, and is now completely managed by the poultry keepers themselves who have marketed eggs upto 13,275 a month. Popularising of bee-keeping has yielded similar beneficial results. A survey of 319 beekeeping families—" not by any means all of the bee-keepers in the Martandum villages "—showed that they had increased their annual income by Rs. 300 through this single source. These results show that the work of starting small-scale and cottage industries has to be linked up with all reconstruction work.

In planning for a subsidiary income to the farmer, special emphasis must be laid on developing what are called the agricultural industries* such as manufacture of butter and ghee ; extraction of oil from oil-seeds and oil-fruits ; manufacture of flour, starch and glucose ; making of *gur* and canning of fruits. Introduction of mixed farming in particular, would be of immense benefit to the cultivator if, as already pointed out above, the livestock industry is improved and organised on efficient lines. In the West, exploitation of cattle wealth is one of the chief means whereby the level of farm incomes has been raised. In Switzerland, for instance, 68 per cent. of the cash income of farmers is derived from cattle farming as against only 5 per cent. from cereal production. In Germany, where 60 per cent. of the farms are small holdings, the farmer by taking to livestock industry has asserted the superiority of the small farm over the larger farms. To introduce such industries in India, however, presupposes a detailed knowledge of local conditions and problems, as also an organisation that would encourage the people to self-help and co-operation. The remedy is, therefore, to start Rural Reconstruction Centres all over the country.‡ To cover the seven lakhs of villages, we should need about 15,000 such centres, each centre to be in charge of 40 to 50 villages.

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* It is interesting to note in this connection Sir Arthur Salter's recommendation to the same effect for China's industrial development: " Real industrial development must be based principally upon the farmers' purchasing power. It should, in its first stage, be closely related to its agricultural basis (flour mills developing from domestic wheat production, silk from mulberry and cocoon production, etc.), and each subsequent development should be based on those which have preceded it." (" China and the Depression," p. 70.)

† It may be mentioned here that the Committee appointed by the Government of Bombay sometime ago to suggest ways of helping the backward communities in the Province recommended the starting of more Rural Reconstruction Centres along these lines to introduce poultry farming, sheep raising, wool production, horticulture, etc., and to give scholarships to trainees for the necessary study. Work along similar lines is also being done at some of the All-India Spinners' Association centres where they teach mainly spinning, weaving and the other processes incidental thereto.

Government would have to assist them, financially, and enable them to train up workers. Now that the teaching of handicrafts is recognised as an essential part of primary education, these centres should prove of special value in providing expert advice for such teachings in different areas.

II. Intensive and Extensive Agriculture

As regards intensive agriculture through better implements and tools and by better methods, not much needs to be said here, for we have dealt with this aspect in connection with land holdings and land utilisation. And, as for extension of cultivation, although the scope for the same is not unlimited, it is considerable. Schemes of land reclamation and utilization are necessary for this purpose. It would be possible substantially to add to our rural incomes by utilising rightly our forest resources, by extending irrigation, by developing scientific cattle breeding and animal husbandry, and by encouraging the processing of agricultural products on the spot as far as possible. So little has been done in these directions so far, that there is an almost unlimited field of improvement here.

III. Emigration

Lastly, we may consider emigration as a remedy for population pressure. It is true that this remedy helped several European countries considerably to reduce the severity of the population problem in the nineteenth century, some 50 million of their inhabitants having left their homelands for other continents between 1820 and 1920. It may also be true that " given free opportunities of migration, the Indian peasant with the traditional skill and method of rice culture may introduce a new era of prosperity into the Guianas, the low lands of Brazil, the Central American and West Indian region, the Guinea coast of Africa and the Zanzibar region, as his dry crops may prove a godsend to such sparsely peopled regions as Sudan, Nigeria, Mozambique, Madagaskar and North Australia "* But, taking a realistic view of things, the possibilities of emigration for Indians are small and are diminishing owing to the unfavourable treatment accorded to them not only in the U.S.A., but also in the Dominions, and the growing discrimination against them even in neighbouring countries like Ceylon.

Conclusion

To sum up, the problem of finding employment for the people who must be removed from the land and also for the new generations

* R. Mukerjee: "Economic Problems of India," Vol. II, p. 181.

can be solved only by a simultaneous and well-planned development of agriculture and industries in such a way that the two supplement and complement each other. This will take time, and will need careful planning. There is no other way but to utilise all our available natural and human resources to the best advantage possible, and this, under present conditions, presupposes a special emphasis on rural industries, such as could be run on an economical basis, given suitable financial and other assistance from the Government. This problem is not merely economic in the narrower sense, it is one of organisation and administration as well ; it is one, not only of providing cheap power and suitable machines, but also of finding the right type of organisers and workers.

CHAPTER XIX

PRIME AGENCIES OF REFORM

The Present Machinery

AS important as the reorientation of policy and the actual reforms to be introduced is the problem of setting up the right administrative machinery and of creating appropriate agencies for initiating, supervising and carrying through these policies and reforms. For the larger tasks that we have envisaged, it will be necessary, first of all, to change the spirit of the administrative hierarchy, and, secondly, to set up agencies in rural areas which would harness local talent and create the spirit of self-help and self-improvement among the villagers themselves. In this connection, we may first see briefly the defectiveness of the present administrative arrangements.

I. The Reform of Administration

The administrative system, it is obvious, reflects the purpose behind the State. The State lives and acts through the administrative system, so that the latter is but an expression of the system of purposes embodied in the State. Therefore, the reform of the administrative system has to be considered in the light of the enlargement of the sphere and the widening of the activities of the State. An administrative system has to be considered in the light of the enlargement of the sphere and the widening of the activities of the State. An administrative machinery built up mainly for the maintenance of law and order cannot cope with the new demands on it consequent upon of the adoption of the larger view of the end of the State which we have put

forward. The character of the present Government has inevitably been reflected in the ways of the bureaucratic machinery. The officials, however highly qualified, look more upwards than below to the people for appreciation of their work. This is true of the entire hierarchy down to the lowest rung of the ladder. The constitutionally irresponsible character of the supreme executive in the country stamps itself on the entire administration. As soon as the character of the supreme executive changes, there comes over a corresponding change, slowly yet unmistakably, in the attitude of the officials who translate State policy into action and come into daily contact with the public at large. It is this which probably explains the high sense of duty, integrity and complete self-effacement of the British civil servant on the one hand, and the snobbish, stiff-necked attitude of the average official in India.

The Spirit of Administration

These general reflections at once suggest the main reform necessary in India, which is a change in the very spirit of the administration. The bureaucratic system we have to-day has failed to understand the needs of the peasantry. Routine and red-tape characterise official activities in all fields, so that the legislative measures passed often with the best of intentions fail to produce the desired result with the desired rapidity. Few will maintain that to-day the masses at all look to the officers for sympathy, help and guidance. The officials and the non-officials seem to be two separate categories altogether, two parties in opposite camps, rather than co-workers though in different ways. If the State is to play its effective part in functioning as a social service institution, its officials from the top to the bottom must be inspired with the spirit of service. They should be quick to see the people's needs, to gauge their difficulties and to sense their feelings. Their " stand-offish " attitude must go. They must look upon themselves as the guardians of the people, as functionaries rather than as privileged persons. This change in spirit can be brought about by proper direction from the centre ; it would follow a proper system of recruitment and promotion, the criteria of which would have to be changed radically in keeping with the new ideals of policy suggested above.

Red Tape and Routine

How the present system of administration fails to understand the needs of the peasantry is illustrated by the experience we have had of *taccavi* loans. For obtaining a *taccavi* loans, when he is in distress, the villager must go through an elaborate procedure, involving long

delays and often a few journeys to the Taluka headquarters. Even after all this, he would be lucky if he could get the needed assistance without having had to pay somebody something. The methods of recovery are also inelastic and unsympathetic. It has been acknowledged by all Committees and Commissions that even in his hour of need when the cultivator is entitled to borrow from the Government, he prefers the money-lender who is easily approachable and whose ways he at least understands. It is on these considerations that the better classes of cultivators who have some sense of self-respect do not ask for these loans and borrow from *sowkars* at exorbitant rates.

Examples of official dilatoriness would come ready to anyone who has had to deal with the administration at all. It is not unusual for correspondence to be flung about from office to office several times on flimsy, technical grounds, and there are always devices by which such delays may not be allowed to figure in the monthly returns. " Justice delayed is justice denied " is a maxim that is applicable to several spheres of administration besides justice. The inefficiency of civil administration in this country has been brought out vividly and tragically by the famine in Bengal, where the situation got under control only after the military was requisitioned to arrange for the transport and distribution of foodgrains.

Corruption

Then, there is the fact of corruption. There are innumerable occasions when the villager wants something to be done through the officials. He comes into contact, obviously, with the lower services of the Department of Revenue, Justice and the Police. The villager may want some facilities, concessions or exemptions ; he has to pay his land revenue ; he may have to appear as a witness in a civil suit or a criminal case ; he may want some document to be registered. On all such occasions, he has to court the favour of somebody in the hierarchy, or else, submit to delays, inconvenience, unnecessary expense and even harassment. Often he is ignorant of the right procedure ; sometimes he wants to escape the clutches of the law. The only way out for him is to grease somebody's palm, to submit to some illegal exaction.

It is not intended to suggest that corruption is universal, or, that where it exists, the fault is entirely on the side of the officials. But, that the evil exists is undoubted. Governments themselves are not unaware of this. When the popular ministries came into power, they organised an anti-corruption drive in several Provinces. Our point mainly is that it is the spirit of the services which has to be changed if a real improvement is to be effected.

It is well known that the villager has to submit to *veth* or *Begar*, forced services for which he may or may not be paid ; even if he is paid, the remuneration is small. His own services or those of his cart may thus be requisitioned in the midst of agricultural operations. Then, again, when an officer is camping in a village, the people have to feed his subordinates even if he pays for what he gets for himself. If there is a criminal investigation proceedings, a board of subordinate members of the Police visit the village and stay there for some time, mostly at village expense.

Supervision and Inspection

Government have appointed inspectors to go round offices to see that they function well and efficiently. They call for returns to show that cases are decided expeditiously, and instructions are frequently issued to officers to decide cases on the spot as far as possible and to give prompt relief. There is a provision for the training of officers and the lower staff in the work of office management and the developmental activities of Government. But all this has not as yet produced the desired result. The Police are hardly literate and the education of other officers remains but meagre.

The influence of the higher officers who may be normally expected to set matters right is also unfortunately waning. The advent of the motor car has made it possible for the higher officials to arrange short and quick visits to the villages, and this has meant a loss of contact with the people who are therefore in continuous contact only with the lower services. Even when complaints are made to the higher officers, they try, if possible, to shield their subordinates, for the bureaucracy is, after all, a single unit.

All these factors have sapped the confidence of the peasantry in the officials, whom they frankly distrust and fear. This cleavage is responsible for the failure of many excellent Government schemes ; it also accounts for the comparatively poor success of the co-operative movement. To anyone who ponders over this state of affairs, the situation is too serious for further neglect. A spirit of cordiality between the villagers and the representatives of Government is a primary condition for the success of any schemes of reforms.

The Patel as Official

The present position of the Patel or village headman brings out this fact more glaringly. In olden days, this functionary was the natural leader of the village to whom people looked up for guidance.

He shared their joys and sorrows. He was a member of the village community with some of the best traditions of *noblesse oblige*. Now, he has become an " officer," a servant of the State ; he has to depend upon the higher officials for patronage. His duties are onerous. He has to register births and deaths, to report upon crimes and encroachments, upon the outbreaks of epidemics and diseases ; and, he has to help the village accountant, the land revenue officials and the Police in the discharge of their duties. If he fails in any of these respects, he is liable to be penalised. He has to meet the expenses on the occasion of the visits of officers. Not unnaturally, except in a few honourable cases, he picks up the art of pleasing his masters and fleecing those in his charge when opportunities arise, and they are legion, as mentioned above. It is a method of " redeem up and foreclose down." It has rightly been said that if the Patel, the village accountant and the Police form an unholy alliance, there is nobody in the world to protect the poor villagers against them. The Indian village to-day is no longer the peaceful, idyllic place it is often supposed to be. People having plenty of idle time on their hands from factions, and, not unoften, the men in the lower services of the State take sides. Litigation, false cases and got-up witnesses complete this picture of decadence and disharmony.

All this description may appear overdrawn to one who has not seen village life to-day, but to one who has moved among the village folk and tried to understand their problems sympathetically, it will appear as a correct representation of the social atmosphere in our rural areas. Is it not true, it may, however, be asked, that the conditions have improved as a result of the nation-building activities undertaken by the State ? One wishes that was so ; one does gather that impression from Government reports. Reality, however, is not so flattering. Under official auspices, societies are started, associations are formed, exhibitions are arranged, and ploughs and other implements are sold at concession rates ; even the whole village is cleaned up on a holdiay to please the senior officers. But these activities are usually got up by a new class of village "leaders," men who have acquired some wealth by money-lending and rack-renting, and have ample leisure to take part in village politics. They have their own ends to serve by arranging such " shows," but the moment the senior officer's back is turned, everything goes on as before. These " leaders " are not real cultivators; they have been no interest in farming. Their sons join the services or take to professions. Farming is beneath them

they think. Some of them migrate to the towns and become absentee landlords. If they succeed there, they invest in land again, and thus only perpetuate the vicious system. No improvements are possible under such conditions.

Necessary Reform

The first condition of a successful reform scheme, is therefore, the reform of Government agencies who come into direct contact with the people, so that they shall inspire confidence among the people and win their co-operation. The average villager knows his interest well. He may not be clever and enterprising, but, on the whole, he is sincere, painstaking and honest, ready to follow the lead if it is rightly given.

It has been suggested that nepotism and corruption are evils inevitably associated with oriental countries ; that they should be tolerated and put up with. This is a pure myth. Corruption and maladministration have characterised the corporate life of peoples in several countries in the West at a certain stage of development. Feudal Europe could furnish ample illustrations of the same. Self-Government has been found to be the proper cure for this state of affairs. A people whose self-respect is roused casts off worn-out ideas and ideals, and tries to become progressive. Time was, not so very long ago, when the civilised world used to mock at Japan and Russia for their corruption and internal intrigues and to doubt their capacity for self-government. Yet, these countries have shown what education and self-government can do.

In India, the problem of reform is difficult because of illiteracy, the rigidity of the social system and the passivity of the people through generations of suffering and want. Poverty and the absence of self-government thus cut at the vitals of our national life. And, yet, all said and done, the heart of India is still sound ; it will respond to the proper stimulus. If the spirit of the administration is changed, if there is established a unity of aim between the officials and the public, it is possible to bring about a remarkable change for the better in the countryside. The solution is to imbue the services with the spirit of *noblesse oblige*. The Patel, the Talati, and the Mamlatdar must be well trained in the art of administration, but they should also feel themselves the servants of the people whom they must train up gradually for a better life. In more senses of the phrase than one, we must educate our masters.

The drive for economic uplift which we have advocated throughout these pages will itself generate new healthy forces. The administra-

tive machinery, if reformed as above, will supply the needed guidance to the villagers. But above all, it is also necessary to help the villagers to develop their own activities through their own institutions. For this latter purpose, we have to provide in each village a *panchayat*, a co-operative society and a school and to foster through them and also in other ways a new corporate life.

II. The Revitalisation of Village Life

A. The Panchayat

Let us start with the *Panchayat*. We have dealt in an earlier chapter with the decay of the corporate life and institutions in the villages as a result of several forces which affected village life after the advent of British rule and the introduction of the competitive, cash-nexus economy. We have traced the recent attempts by Government to revive the *Panchayat*, and also reviewed their working. This examination has brought out several weaknesses in the organisation and finance of these bodies. It is undeniable, however, that a resuscitation of the *Panchayat* offers the best hope of bringing about that change in the outlook of the villager the need for which the Royal Commission on Agriculture so rightly stressed. The response to Government efforts to establish local self-governing institutions on a sound basis has hitherto not been very encouraging, but, given the right effort and sufficient persistence, there is little doubt that the spread of such institutions along the right lines would contribute effectively to a solution of the manifold problems of rural reconstruction.

The first step in this direction is the establishment of Statutory *Panchayats* in all villages, grouped suitably where necessary. It is for the Provincial Governments to take initiative in this matter and to set up *Panchayats* without imposing on them any conditions precedent such as the imposition of a house tax as in the Bombay Presidency. The *Panchayats* thus set up should be assured of a certain income as from the local cess or other local revenues. In the early stages progress would have to be slow, for we have to overcome the inertia of centuries and to eradicate the evil of ignorance, illiteracy and prejudice on the part of the villagers before they can be made to take active interest in their own civic affairs. The aim in the early stages should be to help, advise and encourage the villagers in every respect, taking good care to see at the same time that the movement does not become "official" in its approach and methods.

This implies that village workers would have to be specially trained in the handling of rural problems, such as sanitation, health, nutrition, education, village housing, rural engineering, rural industries, etc., so that they could deal with the villagers in a sympathetic manner with a full understanding of their difficulties. A main difficulty in respect of the *Panchayats* has hitherto been the paucity of funds. Here, the various reconstruction funds set up by Provincial Governments could be utilised by way of capital grants, or grants-in-aid for recurrent purposes. Suitable arrangements could also be made for borrowing by *Panchayats*, once they are established on a sound footing. Their unwillingness to tax themselves could only be overcome gradually, for the village people have first to be convinced that the proceeds of these taxes would be utilised to extend social services for their own collective benefit. There is no reason to believe that if funds raised by taxation are used for these purposes, the villagers would not, in course of time, realise the benefits of the same. But more than this, the emphasis should be on voluntary labour organised by the *Panchayat* itself. For example, in road-making and repairs, in sanitation and in a number of other activities, the villagers could be persuaded to work in turn either gratis or on nominal payment. The idle labour in the villages could be recruited cheaply whenever there is need. The well-to-do classes could also be induced, provided there is the right appeal, to make donations and endow social services and institutions. The State would have to make an offer of a certain sum on condition that the villagers find from among themselves the remaining amount needed for a specific object. This is the time-honoured method of collecting funds in our villages, and recent experience shows that it is the right method even now.

In this connection may be cited two instances of such work in the Baroda State, one of a small town, Bhadran, of 6,000 population and the other a village, Ranoli, of 1,800 where with proper guidance and aid the people have been able to create modern institutions that would promote their moral and material development.

Bhadran is the headquarters of Peta-Mahal with 35 villages. It possesses the following public institutions put up with the help of the District Board and the State in the shape of grants-in-aid or loans, and the contributions by the people themselves by way of special donations from leading citizens, and supplemented from their municipal revenues :—

(i) A high school with a boarding house attached to it.

(ii) Three libraries in separate buildings for men, women and children.

(iii) Municipal water works and an underground drainage.

(iv) A Town Hall and a clock tower with a public garden attached.

(v) A hospital with a maternity ward.

(vi) A Development Association which manages several institutions of the town such as a Vyayam Mandir—a gymnasium—for men, as also another for women, a Sanskrit Pathashala for all classes of people, a Boarding House for students and an English School for students who could not get admission in the High School, kindergarten classes and a dispensary, a Women's Institute teaching upto 4th standard English as well as subjects connected with domestic science, an Industrial Home for women, a Khadi Karyalaya, that is, an institute for the production of khadi.

(vii) An Agricultural Bank which finances co-operative societies in the surrounding areas and grants loans to individual khatedars.

(viii) Government Vernacular School for girls.

(ix) A Veterinary Dispensary.

The town has seven oil engine sets irrigating a considerable amount of land in its *seem* area. It owns a radio set and a set of loudspeakers used for popular entertainments. It is a centre for the propagation of the Rashtrya Bhasha—Hindi. It possesses eight *Dharmashalas* for men of different communities and has also a crematorium specially built.

It will be admitted that there are not many towns and even cities in India possessing institutions like these. Bhadran is a small Patidari town with a very enterprising class of people taking full advantage of the educational facilities provided by the Baroda State, and participating actively in trade and business. Their public spirit is admirable and they would like to have every facility that modern life can provide. It is an agricultural town with none of the modern industries. It is only recently linked up with the railway system of the Baroda State. The people want to have an electric supply station for the town and would have got it by now had it not been for the war. The point is, the people have responded well, and their own contribution to these amenities amounts to several lakhs of rupees. The

influence of Bhadran on the surrounding towns and villages is considerable.

The second instance is of a small village—Ranoli—eight miles from Baroda, situated on the B.B. & C.I. Railway main line. The total population of the village is 1,834 of which 250 are Patidars, 1,249 are Barias, and the rest are lower classes of cultivators and labourers. Of the total of 2,300 bighas of agricultural land, 1,500 are held by the Patidars, the Barias own 500, while the remaining 300 bighas are held by members of other communities. This can be called a typical Gujarat Patidari village. Of the total population, 43 per cent. is literate. During the last ten years this village has built up the following institutions with help from the District Board and the State and private donations :—

(1) A public library with a building of its own—Rs. 3,800.
(2) A village tank—Rs. 14,602.
(3) A gymnasium—Rs. 1,500.
(4) A recreation hall—Rs. 1,924.
(5) A Gujarati school—Rs. 5,700.
(6) A public dispensary—Rs. 12,000.
(7) A maternity home—Rs. 9,651.
(8) An Anglo-Vernacular school—Rs. 8,897.
(9) A Government rest-house—Rs. 2,900.
(10) Water-works—Rs. 11,510.
(11) A clock tower—Rs. 3,500 and
(12) Harijan quarters—Rs. 6,000.

The total cost of all these buildings was Rs. 85,984, of which the Baroda Government contributed Rs. 22,973, the District Board Rs. 10,087, the pioneer cultivator of the village and the members of his family Rs. 25,000, and other members of the village Rs. 16,624. The remaining amount was contributed by outsiders interested in the village.

A special feature of this village is that it was the pioneer of fruit culture in Gujarat. It started with the grafting of *bor* trees of a new and better variety by a leading cultivator who with the members of his family has contributed, as mentioned, above, Rs. 25,000 towards the expenses of the village institutions. The village developed and expanded this trade in fruits all over Gujarat and even beyond, and introduced the same system of fruit culture elsewhere. Then the pioneer took to ' chikoo ' cultivation and later on to grafting of mangoes and the planting of citrus fruits. He and other cultivators of the village

also took full benefit of the State concession and reclaimed 500 bighas of '*kotar*' lands round about. The village is situated near the Mahi River which has created numerous ravines. Most of the '*kotars*'—ravines—round this village have been reclaimed by means of bunds and used for the plantation of tobacco and mango trees. There are party factions also and attempts are made to run down the efforts of the reformers—due mostly to petty jealousies and some time due to intrigues in which the lower services participate. All the same, the development continues—thanks to the courage and the public spirit of the leaders.

Many more instances of this kind could be cited from Mysore Madras and Bombay, but these should be sufficient to show that given appropriate guidance, the task of resuscitating *Panchayats* along right lines and developing them as real agents for rural reconstruction is by no means impossible of fulfilment.

In this task of fostering of the village *Panchayats* the District Boards have an important part to play. It is well known that many of the District Boards are not functioning satisfactorily and require remodelling. Under Provincial Autonomy, the process had started and it may be resumed when popular ministries are restored. If District Boards are equipped with an efficient staff and are thus in a position to render services according to the local needs, they can organize rural life and place it on the path of progress. Proper guidance by a well organized District Board is the only method of training people for the promotion of their own welfare at their own hands. The training which these institutions could give them so as to bring out the right-type of local leaders cannot be had by any other method. The comparative failure of our local self-governing institutions has been due not merely to paucity of funds but to administrative inefficiency, lack of proper leadership, and, in a word, lack of civic sense. In the past, the Provincial Governments exercised little supervision over the day-to-day working of these bodies and when things went seriously wrong, the only weapon in their hands was supersession. It is, we feel, for the District Board, suitably staffed and equipped, to provide the expert guidance and effective supervision so necessary for the smooth working of village *Panchayats*. We may add here, however, that progress along right lines will ultimately depend on the success of educational and economic measures for uplift which would tune up village life to a new pitch.

B. The Co-operative Society

Like the *Panchayat* in the civic field, the co-operative society, properly organized and worked, is a most useful instrument of economic regeneration. The main shortcomings of the co-operative movement hitherto have been that it has been conceived in a narrow spirit ; the movement has not enlisted sufficient support of non-official rural workers ; and, there has not been sufficient educational work among the village people to instil in them faith in and loyalty to the co-operative ideal and method—the principles of thrift and self-help. Moreover, the movement has tried to tackle problems of rural life by compartments. Societies for credit and non-credit purposes have been multiplied, but each one of them deals with a narrow aspect of the villager's problems ; none is concerned with the whole man as such. The movement has therefore affected only a small percentage of the rural population ; it has failed to develop into a full-fledged system of rural finance and rural uplift through material aid. The movement thus lacks coherence and vitality, and, no wonder, the results so far obtained have been rather poor.

Co-operation has so far not succeeded to the desired extent because it has not been an integrated movement, and it has little chances of success unless this defect is set right through a reorganisation of the movement along multi-purpose lines.

For such a reorganisation, it is necessary, to take into account the classes of people we have to deal with and to adapt our policy accordingly. If we analyse the position of the agriculturists, they may be divided into three distinct sections. The first would include 10 to 20 per cent. of the population who are successful traders-cum-landholders, holding a good portion of the lands in the village, fairly prosperous according to the conditions of the village, intelligent and fairly well educated. The second class would include about 30 per cent. comprising of small holders, of moderate means some of them living on the margin, indebted and slowly losing land to the first class. The remaining 40 per cent. and over are petty holders who combine casual labour and cattle breeding for the richer classes, but are sunk in debt, physically weak and dilapidated in health, socially down-trodden and suffering from inferiority complex. Their farm equipment is inadequate and method of cultivation distinctly of a low type resulting in poor yields.

In the first class, again, there are two sections. One section is well-meaning but unwilling to take any responsibility for managing,

a co-operative society. Often this section does not like the attitude of lower Government servants and is not anxious to come into contact with them. It is very seldom that a man from this class would come out and assume leadership. Wherever he has come forward, however, he has done well. The second section comprises the ambitious cultivator—sometimes a friend of the lower services—highly intelligent and always ready to make money, vocal and active but unscrupulous and out to take advantage of the misery or the ignorance of people. Men from this class are always anxious to assume the leadership of co-operative societies and run them to their advantage, take disproportionately large loans directly or even by *benami*, commit defaults and ruin the societies. Societies thus managed show good work during the first two or three years. If during this period, they are carefully watched and directed, some of them turn out to be good, but the moment the supervision becomes lax, mischief starts. It has been the constant endeavour of the co-operators to counteract the mischief played by this class of men. Rules are framed and revised to checkmate them, but they are resourceful enough to change their tactics to suit new situations. They would behave better if they were constantly supervised and guided.

The second class of agriculturists mentioned above is fairly trustworthy, under the prevailing conditions of disorganised village life. Most of them are highly indebted though some of them command good credit at reasonable rates. Co-operation could help them considerably to save their lands and lead them to prosperity.

The position of the third class is almost beyond hope and no mere credit would help them ; they may be assisted in a small way, but not materially. Hence other measures would have to be used to rehabilitate them. They need help to re-equip their farming stock and implements ; those of them who are thrifty and hard working would have to be provided with funds for the purchase of lands. Besides collective sales and purchases, they need subsidiary industries to supplement their small and uncertain incomes. Finally, better result could be obtained if, as we have suggested elsewhere, rural reconstruction centres of the Martandam type were associated with the co-operative societies. For both the classes mentioned above, the co-operative society must handle all economic activities of sales, purchases and credit as also technical improvement in agriculture and cattle breeding. Co-operation must aim at increasing the earnings of the agriculturists, and to reduce with the help of these new earnings the burden of debt on

them. Even a downright cancellation of rural debts cannot improve the situation unless the principles of thrift are adopted in all their transactions and the purchasing power of the rural masses is increased.

Credit alone would not rehabilitate them. It may save a little in interest charges but the bulk of the loss to the agriculturists comes from their method of selling the produce and the purchases for their domestic and other needs. The difficulty is also their inadequate equipment or the lack of good seed or manures, premature death of their cattle or sickness in the family. The losses arising from these directions are far greater than those from payment of usurious rates. This point is often overlooked, but it is vital. The proper course would be to save the cultivator from all avoidable losses and to arrange for larger production on his farm so that the deficit economy may be turned into a surplus one and the cultivator set on the road to economic stability and prosperity.

Multi-purpose Societies

Such a development is possible only if the co-operative society is conceived and arranged on a multi-purpose basis so that the whole man is taken on hand and efforts are directed to rehabilitate all aspects of his life. The idea of multi-purpose co-operative societies has been before the country ever since Sir F. Nicholson submitted, in 1895, his monumental report on Land Banks in India. The rules ofmost of the primary credit societies based on the Raiffeisen model provided for it, but in practice it was ignored. However, the actual experience gained in the working of societies run on multi-purpose lines has been quite encouraging.

In this connection, the experience gained at Kodinar in the Baroda State is of special interest and significance. How the multi-purpose co-operative societies and the multi-purpose union bank at Kodinar were organised and run are described by Sir Manilal Nanavati in a Note attached to this chapter. The Kodinar Union and the societies were reorganised by him and therefore his own description of the stages by which the organisation was put on a sound basis should interest the reader.

The societies in the Kodinar taluka were started on a multi-purpose basis, so as to help the agriculturist in respect of all his problems. Collective sales and purchases on indent system were arranged ; improved furnaces, boiling pans and crushers were introduced ; an implement store was opened ; and, improved seeds and manures were supplied. The primary societies were required to maintain their own

primary accounts, they were to find a local secretary from among themselves, and the secondary accounts were to be written up by the Union's clerical staff. In course of time, even the smallest societies were able to attract deposits to the tune of a few hundred rupees. Certain lines of development were chalked out for each society in accordance with the capacities of the members and the affairs of each society and union were re-examined at the end of the year and suggestions for further improvement were made. Under proper supervision and guidance, the Directors of the Union Bank who were drawn from the primary societies showed creditable results. The Union has now a share capital of Rs. 22,470, a reserve fund of Rs. 20,576, a building of its own costing nearly Rs. 10,000 and Rs. 1,10,000 as deposits. Its report for 1942-43 gives the following figures to show the non-credit work of the Union :—

"The Kodinar Banking Union sold 17,506 maunds of seed cotton worth Rs. 51,720 of 38 societies, 1,191 maunds of bajri worth Rs. 2,050 of 12 societies, 362 maunds of groundnut worth Rs. 722 of 5 societies, and 224 maunds of other produce worth Rs. 745. Besides this, the Union supplied agricultural manure, cotton and groundnut seeds. *jowar, gur* tins and iron ploughs to the societies affiliated to it and purchased and sold 1,117 maunds of *bajri* seeds worth Rs. 2,535 to 2,192 individuals and 645 maunds of wheat seed worth Rs. 2,580 to 1,149 individuals."

The primary societies have also been working well on the whole.

This experience of Sir Manilal Nanavati regarding the Kodinar Banking Union and societies was brought out in the first Bulletin issued by the Reserve Bank. It created reactions of two distinct types. The Press and the general public welcomed the idea behind the organisation. The old veteran co-operators criticised it on the ground that there was nothing new in it and that the rules of co-operative societies envisaged multi-purpose activities. They also suggested that it was dangerous to combine credit with other activities, as the societies would be unable to manage these various functions. They, therefore, stuck to the old idea of having separate societies for different functions. They also felt that the District Banks were well managed, had all the funds they wanted for the movement and that the combination of banking with other activities was impracticable.

Encouraged by the favourable reception given by the general public to their first bulletin, the Reserve Bank published their second

Bulletin on Co-operative Village Banks in 1937. It attempted to give a general outline of village life and conditions and brought out the place of co-operation thus conceived in the economy of the village. The analysis attempted there brought out two important considerations to be borne in mind by those who work for rural reconstruction : (i) that although the problem is too vast to be tackled in anything like an adequate manner at all places simultaneously, taking up only a few aspects of the problem for treatment in an isolated manner in each village is not likely to lead to satisfactory results ; and (ii) that it is necessary to enlist in this task of reconstruction the sympathy, goodwill and active co-operation of the leaders of the village in question, so that the best and lasting results may be obtained by the combination of local initiative with the necessary expert guidance from outside. This Bulletin led to some heart-searching among co-operators, especially in those Provinces where overdues were mounting up and the societies were being liquidated on a large scale.

The popular ministries in the Provinces were anxious to push the movement but they were not prepared to build a structure on the old one. Some leaders recognised the need for multi-purpose societies and suggested that such societies should work on the basis of limited liability. This showed that they were losing faith in the unlimited liability principle for the members of primary societies. This changed attitude originated in Madras where a few societies of a multi-purpose type but on limited liability were organised, with membership scattered over a larger area covering a few villages. One of them at Alamaru has been working satisfactorily. The Registrars' Conference at Delhi (1941) passed a resolution asking the provinces and the States to make experiments with the multi-purpose type of organisation. Special concessions are now given to such societies towards the expenses of their management as in Bombay and in the putting up of warehouses for storing the produce as in Madras. In Madras, the Registrar issued a special circular in 1942 (R. C. No. D. 16537/42 M., dated 12th August 1942) asking the staff to expand the activities of the societies on a multi-purpose basis.

But in this new organisation one of the important links has been missed. The attempt there has been to run the primary credit societies with the additional activities without creating supervising institutions on that basis. By the installation of a small paid staff in the villages he real co-operative spirit cannot be created. These men would soon dominate the society as they have done where group secretaries,

have been appointed. The correct method would be to create small taluka banking unions to which should be affiliated the societies in the locality. The union should be put in charge of a well qualified and well paid manager, preferably an agricultural graduate of some standing. The leaders of good societies should be asked to serve on the Directorate. Non-credit functions should be undertaken as the members feel their way and seem capable of undertaking them under the supervision of the union.

In many cases the societies are already affiliated to a District Bank and it may be difficult to create a new Union Bank. The proper course would then be for the District Bank to decentralise and put up a small branch with a local directorate drawn preferably, from the societies. Of late, a welcome change seems to be coming over these banks. Instead of leaving the supervision of the societies to the Supervising Unions. they are now assuming it themselves ; and in Madras this procedure seems to have been finally accepted. Some of the District Banks are taking more interest in the non-credit activities of their member societies, and, in course of time, it may be hoped that they will modify their methods of work and assume larger responsibilities. Thus, it will be necessary to change their general outlook, and this will be possible only when the influence of the city men is considerably reduced. The belief that these banks could be managed only by city men with a position is unfounded. The result of this mistaken belief is that when there are difficulties in finding an outlet for their funds, these city men think of employing them in commercial banking business. This escape threatens to undermine the whole movement. Financing of rural societies is a risky business and unless carefully watched, it is bound to fail. It is not banking pure and simple ; it is a part of the process of the rehabilitation of the life of the villagers and its aim is to place them on a surplus economy from a deficit one, to reduce their unnecessary expenditure, social or otherwise, to improve their produce, to enable them to pay off debts from their surpluses and to put their whole farm economy on a paying basis. Unless the movement recognises these basic facts and creates a suitable organisation for the same, the efforts of co-operators would be wasted, as hitherto. The real impetus must come from the villagers themselves who would provide, in course of time, leaders with an understanding of rural needs. Such leaders should be trained for service in the villages.

It is not suggested here the multi-purpose primary society with the Union Bank is the solution of all the problems of village economy,

nor that a mechanical application of this idea, irrespective of local conditions and needs would answer the needs of every case. It does appear, however, that the Union Bank could be a potent instrument for improvements through which could be linked up all the activities of Government which, at present, seem to flow in too many unrelated channels and thus run to waste. What we really want is an integrated movement with all agencies co-operating with each other to build up a firm co-operative edifice.

We may, in conclusion, repeat that conditions in India seem exceptionally suitable for multi-purpose co-operative societies. In Holland and in Denmark, it may be possible for members to join different societies, each specialising in one set of functions. But, in India, where we have to deal with an illiterate and unorganised peasantry, it would be best to focus all forces of regeneration into one institution and to place the same on a sound footing so as to inspire confidence. Our villagers are averse to seeking advice from a multitude of organisations and agencies ; they would prefer to listen to a few trusted advisers whom they know well. Such advisers the Union management can provide. As Bulletin No. 2 of the Reserve Bank puts it, " The object of the bank should be to raise the lowest to the level of the most efficient. There should be therefore room for everyone . . . Even the poorest man, who is unfit for receiving any credit, can get other advantages from the bank such as cheap purchases, moral support in the cutting down of social and religious expenditure, training in business and co-operative education."*

The multi-purpose society, we feel, can be a great educative force. It may, in the initial stages, start on small beginnings and may help the members in small matters. But, in course of time, as the members get used to co-operative methods and learn to trust one another by constant contact and mutual dealings, the principle of co-operation may gradually be applied to wider purposes, such as co-operative farming, processing of crops, irrigation, village water-works and the provision of other amenities of life. Co-operative farming is a promising solution of the problem of uneconomic and scattered holdings, but at present the villagers are simply not ready for it. They have not the necessary experience and courage for such a reorganisation. If all the needs of the villagers are catered for through a multi-purpose society, they would get the needed experience and courage, and so, in course of time, better farming, better business and better living may well become a reality.

* Page 31.

Finally, it may be pointed out that all this pre-supposes a co-operative staff with the requisite knowledge and outlook. Too much attention has hitherto been paid to routine work and mastery of rules and regulations. The staff of the co-operative department must have, it is obvious, a good knowledge of the economic and social conditions of the area in question, and should be in a position to adapt the societies in their charge to the special needs of the area. It would probably be desirable to require each officer, in addition to his general duties, to take charge of one village, concentrate on the same and watch the results carefully. This method would test his abilities and would give him an opportunity for developing the village in the light of his own judgment and experience. The co-operative department should also have a research branch under it to make periodical surveys of the working of co-operation in the different areas so as to maintain a proper record of experiences gathered and difficulties overcome. The Review of the Co-operative Movement by the Reserve Bank of India in 1941 made a recommendation to this effect but it has yet to be implemented by the Provincial Governments and States.

C. The School

The third agency we envisage as an essential part of the work of revitalising village life is the school, for after all, the problem of providing the right kind of education is the crux of all reconstruction work economic, political and social. It follows from this immediately that the school must embrace all these aspects of life and must prepare the younger generation for the manifold demands that are bound to be made on them in all these spheres. Here, again, we have seen earlier on how a narrow view of education as just literary learning of a rather elementary type has vitiated the whole educational system as it has evolved in this country since the days of Macaulay and how, for this reason as well as for others, the needs of rural life have been almost completely neglected in the system so far. The result is widespread illiteracy on the one hand and over-production of the wrong type of educated people on the other, so that there is waste and inefficiency at both the ends. We are not concerned here with the reform of the educational system as a whole, but only with the role of properly organised schools in revitalising village life. That we need a rapid extension of schools to the remotest villages is not a point that should need any elaborate argument. Universal education is the very *sine qua non* of democracy ; the right to sufficient and suitable education is the most fundamental of all human rights. Modern States have

recognised this right, and, for India also, we have before us the plan prepared by Mr. Sargent for the removal of illiteracy which envisages ultimately an annual expenditure of over Rs. 300 crores to be met partly from public funds and partly from other sources. The main question for us, therefore, is only as regards the type of schools necessary in the rural areas and the way of organising the same so as to secure the best results.

The village school must be the centre of enlightenment and culture for the locality. It must provide not only for education in the three R's but for vocational training on a small scale. The environs of the village, the kinds of soil, the processes of agriculture, the uses of irrigation and electricity, the technical improvements in farming implements and tools, in fact, all problems with which the village boy is in living contact should be dealt with in the school. Elements of biology, botony, geography, physics, mathematics, etc., can best be included in this manner. Attached to every school there must be a workshop, or call it a laboratory, where the children watch the operations of the handicraftsmen and learn a bit of the craft by lending a helping hand in the process. Side by side, with the education of children the school would have to make arrangements for the education of adults, and all this would have to be supplemented by publicity and propaganda through film and radio. Exhibitions, fairs, etc., which may be organised by the various agencies doing welfare work in the rural areas could be linked up with the school, which would thus come to occupy a central place in the intellectual activities of the area. A good school has been defined as one which develops fully and harmoniously the body, the mind and the soul of the children under its care. This is no easy task. Fine phrases like spiritual instruction and character-building may be used to conceal an attempt at casting the minds of the pupils into a fixed mould and cramping their capacity for free thought. These are questions for the expert educationist and philosopher. From our point of view, we need only emphasize the fact that the school must impart instruction in such a way as to link it up with real life ; it must have ample facilities for broadening and for creating in them that new outlook on life which is fundamental to any scheme of rural reconstruction.

We have had occasion several times in the course of this work to to mention the degeneration of the village people as a result of abject poverty and lack of facilities for mental or intellectual growth. The typical Indian village to-day is a home of dissensions, party factions,

disease and filth with hardly a redeeming feature. Our rural population is not homogeneous. There are higher and lower castes the untouchables and the aboriginals, and there are wide differences in their stage of economic and social development. Our aim must be to raise the lowest to the level of the highest, and to raise the highest still higher. The school is the best institution for the assimilation of cultures, for the development of contacts between the children belonging to different castes and communities and for the building up of an integrated national outlook which alone can lay the foundation of an independent and dignified India. A country like the U.S.A. with immigrants from different lands, with different traditions, outlook, language and ways of life, has been able through the educational system to instil in the younger generation the pride of American nationality. The same is true of the U.S.S.R. A national song, a national flag, collective lessons and exercises—all these, small things in themselves, can change the entire mental make-up of the younger generation. If the people at large are to-day apathetic to education, it is only a silent commentary on the arrangements as they stand at present.

Examples of work done in this direction in other countries come readily to one's mind, and one could easily catalogue the requirements of the right type of school by way of a building, a compound, a garden, a museum, a playing ground, etc. When the State decides upon an extensive educational programme, all these questions would have to be paid due attention to, and suitable provision for these requirements would have to be made, as we have indicated elsewhere, by inducing the local inhabitants to supplement State grants. The most urgent reform in this connection is the maintenance of an adequate trained teaching staff and proper equipment in every school. How low education has fallen in our scheme of value to-day may be seen from the fact that the primary teachers are paid salaries which would not keep them even reasonably well-fed and well-clothed ; their status in society is very low, and in most cases, they make a living by managing to get gratuities and " presents " from the parents of the pupils in their charge or often by earning small commissions on petty transactions between parties in the village. The new type of school must be in charge of the right kind of teacher, and it is for the State to make suitable provision for the training of teachers for rural areas so that they interpret the new movement to the village folk and win over their confidence. Th experiment of employing married couples as teachers so as to cater to the needs of girls in the school and the women in the

village, wherever tried, has yielded promising results. The Government of India have recently suggested to the Provincial Governments an increase in the salaries of school teachers, they have also prepared standard plans for school buildings and have expressed their willingness to share in the increased expenditure. This is certainly a move in the right direction. In the new arrangements we visualise, just as there will have to be proper supervision and direction from the centre for the village *panchayat* and the co-operative society, so here, in the case of the school it is for the educational authorities at the Centre to lay out a whole plan and to vary the same for local areas from time to time on the basis of experience. Success here, as in the other fields, presupposes a combination of local initiative and effort with proper guidance and control from above.

During the last twenty-five years, extensive changes have taken place all the world over in the school system, and everywhere it has been recognised that mere literacy is not enough and that a school is a cultural institution in the broadest sense of the term. In India also, individual institutions have been trying to improve the organisation and methods of work in the educational spheres. In some of the cities and larger towns there have sprung up institutions with a wider ideal and objective. They have shown good results by improving the physique of children, by inculcating in them the habits of cleanliness, order and discipline, by making them self-respecting rather than docile and by giving them a new sense of joy and freedom. But, taking the country as a whole, the picture is woeful. It is a case of the blind leading the blind. No wonder, there is a lack of leaders in the rural areas, and the whole atmosphere of life is static and dull. If, however, the new reformist forces are pressed into service, and if the schools are developed along the broad lines indicated above, we should advance rapidly towards the goal of revitalisation not only of village life but of the entire life of the nation.

III. Rural Social Life and Culture

Rural reconstruction does not end with the economic rehabilitation of the village, nor can the reform of agriculture be thought of apart from the necessary changes in social and religious life, habits and customs of the villagers. Rural regeneration to be effective and complete must, in the words of Dr. Spencer Hatch, be "a development towards a more abundant life for rural people—spiritual, mental, physical, social and economic."* It is because these vital streams of life have dried up that life in the countryside is becoming dull and mono-

tonous, the educated and more enterprising feel drawn more towards the towns and cities and the finer traditions are losing force.

It is also for the same reason that the rural reform measures hitherto tried have not taken root in the rural soil, and have remained an exotic growth, influencing little the inner springs of life. The villager is prone to extravagance, litigation, dirt and drink. It has been estimated that as much as 50 per cent. of the rural debts are in many cases due to the expenditure on marriage, death and other ceremonies, from which the villager simply cannot escape for fear of social censure and ostracism. This is not to argue, some enthusiasts have done, that we should deprive the villager of even those few—too few—occasions in his life when he can, so to say, "let himself go." The problem is to substitute healthy sport, recreation and cultural amusements in place of these wasteful ceremonies. Poverty and ignorance have bred apathy and conservatism and it is these factors which account for the absence on the part of the villager of the will to lift himself up from the present morass. The social organisation in the villages has become stratified, and we find as a consequence that while there are a few classes in the rural areas which are in a position to benefit from modern reformist movements or from any assistance which may be rendered by the official and non-official agencies, there are others—the majority—who seem almost beyond hope. Besides, people in India to-day live life at different levels of intelligence and culture, and there is no compactness in the social fabric. All this has to be changed, and it can be changed if the State takes upon itself the task of promoting and assisting reform movements and strengthening the economic and cultural forces of regeneration.

While the *Panchayat*, the Co-operative Society and the School working along the lines suggested above will go a long way towards rehabilitating the village economy and generating hope and confidence among the village people, it should also be borne in mind that steps will have to be taken at the same time to promote social and even religious reform, to organise the leisure of the villagers, to foster cultural and recreational activities among them so as to lead them on to a full and rich life which would lift them above their daily cares and make them not only better agents of production but better and happier men. The village of old was not merely an economic and administrative unit ; it was a centre of corporate life and culture. It had its festivals and festivities ; it had its folk-songs and folk-dances ; it had

its sports and *melas* which gave life to the people and sustained their enthusiasm. In recent times, the village has decayed in respect of all these activities. In our zeal for efficiency and economic reform we should not ignore the social and cultural background of village life, which needs to be enriched and ennobled. The various reforms that we have advocated would be of little value if they merely meant more wealth. We must not lose sight of the dictum that all life is wealth, and that man is the end of all economic, political and social amelioration. It is from a recognition of this fact that we stress here the need for social and religious reforms as also for the conservation of the valuable elements in our village life.

The Example of European Countries

This aspect of the matter has not been lost sight of in the progressive countries of the West, where the State as well as the enlightened sections of the community have realised their responsibility in building better and happier villages appropriate to their culture and environment. The Agricultural Extension Programme of the United States Government is an instance in point. Under this programme, there were in 1932 about 4,500 men and women extension agents employed by the country, State and Federal Governments, living and working in 2,500 out of the 3,000 rural counties in the country. These agents are " for the most part, farm-raised, college-trained men and women who know the technique of agriculture and home-making and who are in sympathy with rural life and want to bring into its efficiency, profit, joy, self-expression, culture, wholesomeness and abundant living. This group of 4,500 men and women county extension agents touch the thinking and impress their message on approximately 20,000,000 rural people annually. They have actually taken on as voluntary helpers or local leaders—320,000 men and women. Besides work with adults there are around 60,000 boys' and girls' clubs with as many leaders, and over 850,000 rural club members, ranging from 10 to 20 years of age."* The National Recreation Association also co-operates with the United States Department of Agriculture in conducting recreation training institutes where leaders for various rural organisations are trained.

Similarly, several European countries have made noticeable advances in this direction. Even in these countries, the initiative came from outside the rural areas. Thus in respect of education, the Workers' Education Association in Denmark, the British Institute of Adult

* Recreation XXV (January 1932) " Government and Rural Life," pp. 547-49.

Education in Great Britain, the National Institute of Rural Culture in Poland, and the Workers' Education Association and the Federation of popular Education Committees in Norway are the results of activities of intellectual groups from outside the village. The nature of some of the bodies undertaking these activities is evident from the following classification* :—

(*a*) Recreation organisations proper—The Study circles in Denmark, the English Folk Song and Dance Society, the Italian "Dopolavora rurale," and the clubs of the collective farms in the Union of Soviet Socialist Republics ;

(*b*) Occupational Organisations—e.g., agricultural workers' unions, farmers' associations, agricultural co-operative societies ;

(*c*) Political organisations—e.g., in Denmark, the Social Democratic Party ; in Germany, the Hitler Youth ; in the Union of Soviet Socialist Republics, the Communist Youth ;

(*d*) Denominational organisations—e.g., in France, the Christian Agricultural Youth Societies, and, in many countries, the Y.M.C.A. and the Y.W.C.A. ;

(*c*) Social institutions—e.g., in Great Britain, the women's institutes, and, in many countries, the women's associations ;

(*f*) Institutions set up by public authorities—e.g., in Germany, the "Strength through Joy" institutions ; in Great Britain, the rural community councils ; in Hungary, the local education committees ; in Italy, the Dopolavora ; in Norway, the Ministry of Education and Public Worship, and in the Union of Soviet Socialist Republics, the Commissariat of Public Education.

These organisations influence the life of the villages by organising libraries, schools, classes and lectures ; by forming associations for the revival of traditional arts, music, dancing and folklore ; by arranging theatrical performances and displaying cinema films and by spreading a network of wireless sets so as to bring isolated villages into touch with the artistic, literary, and political life.

These are some of the ways in which village life can be revitalised and the village community made more responsive to the attempts at amelioration sponsored through appropriate agencies such as we have indicated above. In short, all such measures calculated to raise the intellectual and cultural standards of the rural population in the West either owe their origin to the initiative or receive every encourage-

* "Recreation in Rural Areas," International Labour Office, pp. 18-19.

ment from the State. In India owing to the diversity of castes, and creeds, there would be some difficulty in touching all aspects of the people's life. But with the good will of the people satisfactory results could be attained in course of time.

Government Policy in India

The Government of India, however, has always been unwilling to interfere with the ways of life of the people—particularly of the rural masses. The ostensible justification put forward is that it is inadvisable to do so, lest it should provoke resentment from the people. The assurance given in the Green's Reclamation that the Government of India would follow a policy of religious tolerance and would not interfere with the religious customs and observances of the people may have been necessary in view of the political situation at the time. The assurance may have been given with the best of intentions. But, in practice, this has meant that the Government of India has been a mere onlooker to the continued process of social disintegration with all its economic and moral consequences. That this state of affairs cannot be allowed to continue is obvious, and that implies that the Government of the future must be one which will aim at an all-round improvement of the citizen's life in India. Of all the evils of foreign rule, perhaps this apathy in regard to social reform has been the most serious, inasmuch as it has sapped the vitality of the people and made them inept, docile and fatalistic.

Social and Religious Reform in Baroda State

We may mention here the example of Baroda where, under the auspices of a far-sighted ruler, a good beginning may be said to have been made to mould the social and religious life of the people. Various reforms were introduced during the early years by His late Highness Maharaja Sayaji Rao. In 1883, boarding schools were started for boys and girls of the aboriginal communities and recently the scheme has been extended for the benefit of other depressed classes such as the Thakerdas, Bhils and the Waghers. The next step was the opening of the Ecclesiastical Department whose functions included undertaking of social legislation and influencing the religious beliefs of the people so as to inculcate a rational bias in matters of religion. A law was also passed at this time removing all religious discrimination and giving freedom to all to pursue their faith without being under any sort of disability or suffering any loss of rights. In 1905, another law authorised the State to supervise over the working of the temples

and other public charitable institutions. In 1909, it was ordered that the Public Religious Institutions' Savings should be thrown into a common public fund and should be spent on religious and charitable objects of public utility, irrespective of the caste or creed of the beneficiaries. Many Sanskrit books relating to the performances of religious ceremonies were translated into vernacular so that they may be properly understood by the people. A number of treatises have also been published on the correct interpretation of the Shastras.

Among other measures of social legislation, there is one by which early marriages are prohibited, and anyone breaking the regulation is automatically punished, unlike the British India Act. The fines collected in this manner are used for the education of the backward communities.

The priests performing the ceremonials for various castes are required to be registered and are given a licence to officiate, only if they pass certain tests laid down by the State. No priest can perform a marriage ceremony unless he is thus licensed, and the ceremony has to be performed in the language of the bride and the bridegroom. The Act applies to Purohits of the younger generation only, but in any case it is significant as indicating the trend of Baroda legislation. A school for the training of the Purohits has been started by the States in the Sanskrit Pathashala.

The temple priests are selected with the approval of the State so that undesirable characters are excluded. The manager in charge of temples receiving subsidies from the State is required to prepare a budget every year and submit it to the authorities for approval and the accounts should be available for inspection. Surpluses from the larger temples are used for medical relief and education. From these surpluses preachers are engaged who go about the villages and preach correct ideas of religion and social life specially to people in the lower strata of society. To remove the rigours of the caste system, the Caste Tyranny Act was passed (1933) which protects a member who breaks the caste rules regarding marriage, compulsory caste dinners and such other customs. This legislation has a negative effect in so far as it protects a member who is unwilling to submit to antiquated caste customs and anti-social orders. As a more important piece of legislation Hindu Law has been codified and uncertainties about interpretation of old Shastras removed ; inter-marriage among Hindus is permitted and the rights of women are enlarged.

The State has taken keen interest in the removal of untouchability and has made it possible for the children from this class to secure admission into any school. In several cases, the example set by His Highness brought home to the people, as perhaps hardly anything else could have, the social unity and equality of the people. Thus, for instance, when the Jumma Masjid at Baroda was consecrated after its renovation partially with funds from the State, a dinner was arranged by the Mutavalis on the top of the Mosque when the Maharaja was invited along with the officials of the State and leading citizens of all the communities. On another occasion, the Maharaja invited the leaders of the Depressed Classes to a dinner at the Palace which included besides his own table boys belonging to the Depressed Classes several members of other communities also. This greatly helped to quicken the pace of reforms set afoot for the removal of class distinctions and the amelioration of the backward communities. The success that can be achieved by any single State must, in the nature of things, be limited, but when the movement becomes country-wide, and official as well as non-official agencies work towards the same end all over the country, there is no doubt that the result obtained would be commensurate with the effort put in.

This is only to illustrate that there need not be any hesitation on the part of the State to take bold measures to regulate the life of the individual in the interests of the common good, if only the State commands the confidence of the people. Further inaction on the part of the Government would only aggravate the forces which have been devitalising the villages in India and make progress increasingly difficult with the passage of time. In a country where the general standard of education is very low, where the caste customs militate against the economic welfare of its members, where some of the religious practices are anti-social and exercise a depressing effect on the life of the people and where the apathy of the villages is deep-rooted, the State must come forward and take action on the lines of what has been done in Europe to redeem the masses from total collapse.

It is true that legislation alone cannot bring about social reform, but it is also certain that by means of legislation the State can, on the one hand, help those who want to avail themselves of the new opportunities for a better and freer social life, and on the other, create, in course of time, a public opinion which would be more responsive to social changes found necessary for economic progress.

When compulsory primary education was first introduced in England, the measure was attacked as "subversive of the last remains of English liberty," and yet to-day this is recognised as the most fundamental of the obligations of the State towards its citizens. There is no reason to believe that the experience in India would be different. There may be, there will probably be, hostility and opposition to social reform through legislation in the earlier stages, but in course of time, when the benefits of the same are realised, there would be general co-operation from the people themselves. In some cases, to begin with, it may be of a permissive character to be introduced by local bodies where they consider it desirable and when the general public opinion favours it. The Caste Tyranny Act to begin with may take this form. It is not a question of the State just imposing something on the people. The people are ready for certain changes ; they are dissatisfied with the existing state of affairs. But, they have not the courage to break loose from tradition and custom. If the State gives them the lead, protecting those who come out from the old and obsolete ways of life, the ball would be set rolling. Side by side with legislative measures, would go the spread of education and the increase of prosperity. These two forces have shaken the rigidity of the caste in urban areas, and we may expect the same to happen in rural areas in course of time.

Yet, while introducing all these improvements, care should be taken to see that due attention is paid to the social history and the cultural background of the villages in the respective regions so that they readily respond to the call of bettering their ways of life. The finer and more valuable elements of tradition will have to be respected everywhere and developed so as to make the villagers organise themselves for concerted action.

The ideals of the reform and reconstruction will have to be synthesized with the traditional values respected by the rural population. It has been the experience of many an ardent reformer that the villagers simply refuse to listen to him, unless he becomes one of them, lives like them, talks their language, shares their joys and sorrows and identifies himself with them in spirit. Such workers will have to be trained up and sent to the villages and we may be sure that when all the regenerative forces and agencies mentioned above work simultaneously in a co-ordinated manner, the awakened mass of Indian humanity will cast off its fetters and march forward to the cherished goal of prosperity and enlightenment.

APPENDIX

A NOTE ON THE ORGANISATION OF THE KODINAR BANKING UNION

By Sir Manilal B. Nanavati

The Kodinar Co-operative Banking Union and the village societies affiliated to it, a description of which is given in the Reserve Bank of India Bulletin No. 1, were organised by me in 1912. As they are working satisfactorily even now it would be interesting for the general reader to know the circumstances under which the Union came to be started and the steps that were taken to put it on a proper footing.

Kodinar, situated near Div at the southern end of Kathiawar, is the headquarters of a taluka belonging to the Baroda State. The Karodia Rajputs who inhabit this area are a very backward class of cultivators. For a long time, their progress was hampered by the isolation of the tract, the nearest port or railway station accessible to them being at a distance of 25 miles. Recently, this area has been connected by a railway route.

In about 1895, the Baroda Government started a series of seed deposits in some of the backward tracts of the State including Kodinar. Seed loans were given to poor cultivators and collected at harvest time. In 1905 the Co-operative Societies Act was introduced in the State as in British India, and the seed depot was converted into a *sadar* bank (central bank) and the members in the villages were organised into co-operative societies. The management, however, was bad. The manager was a low-paid clerk but was able to obtain a deposit of about Rs. 5,000 for the bank from local sources. The Society's accounts were managed by the clerk-manager and loans were made by him to individual members. There were no local committees in the societies or Board of Directors at the centre. The manager was all in all.

In January 1912, I was appointed as the Registrar of Co-operative Societies. Soon after taking charge I went to Kodinar and visited practically all the forty villages and some of them twice. It was a famine year and I was asked to give loans through co-operative societies. I soon found that the condition of the people was abject, stark poverty, and any loans given would go to fill the bottomless pit. It was a case of gratuitous relief or of Tagavi loans free of interest. I reported this to my Government accordingly. Work in this field gave me new ideas about the condition of the people and the methods to be adopted for their rehabilitation.

I had just then returned from the U. S. A. where I was deputed by the Baroda Government to study subjects of practical economics—Banking, Insurance, Public and Corporation Finance along with general economics and sociology. In America, I had come in touch with the best thinkers in the American Universities—Columbia, Pennsylvania and Wisconsin—and had had an opportunity of studying under economists like Simon Patten and sociologists like Leslie Ward. During the later period of my stay in that country, I was induced to study agricultural economics under Dr. E. S. Meade, Professor of Corporation Finance.* On my return journey, I went to Ireland and visited the Irish Agricultural Organisation Society started by Sir Horace Plunkett. Then I went to Egypt and got some idea of the working of the Agricultural Bank of Egypt. I give all these facts of a personal nature to indicate the kind of training which is necessary for responsible officers posted on duties similar to those I had to discharge. On my return to Baroda I was placed

* As a result of this study Dr. Meade drew up an examination paper for his class on Corporation Finance on the liquidation of agricultural debts in an Indian State and how it could be arranged. As the question paper would be of some interest to students of the subject doing similar work in India, I give it here :—

University of Pennsylvania—Whorton School of Finance

BANKING

Final Examination *May 19th, 1911.*

Problem I (For reference only)

The native state of Assam—further India is inhabited by farmers whose holdings average from 5 to 10 acres. The value of the land is from $20 to 60 $per acre, according to location. The natives are heavily in debt. On an estimated value of $60,000,000 of land, there are mortgages outstanding of $15,000,000. The rate of interest on these mortgages is from 8 to 10 per cent. Nearly all this indebtedness has been incurred for non-productive purposes, weddings, funeral ceremonies, fines,

on special duty to report on the agricultural indebetdness in the Baroda State. This inquiry had been ordered by the late Maharaja Sayaji Rao in 1901 soon after the famine of 1900. Somehow or other the Committee that was then appointed could not function on account of frequent changes in the personnel. I was permitted to complete this inquiry and submit a report. For nearly 4 months I toured over the State and tried to gather as much information as I could. The report was submitted in September 1912. My findings were that agricultural indebtedness as we found in this country was a symptom of low economic condition, that the people were suffering from a deficit economy and that in order to keep them on a surplus basis efforts must be made to make agriculture a paying proposition.

On making a careful study of the conditions of the Kodinar Taluka, I was convinced that the Union and other societies should be scrapped as the whole show was dishonest. As things stood, I found that no loan could be taken without payment of gratuities to the manager. In addition he had to be supplied with corn and fodder for his family and cattle. His methods of collection were harsh and tyrannous. Physical punishment was not unknown (I was shown a case of torn ear). Under such conditions no respectable man could remain a member of a society. All the better class of cultivators had kept out and only the poor and indigent were admitted.

I spent about a fortnight studying the conditions and I felt that there was a good opportunity to make an experiment in rehabilitation through co-operation. On return to Baroda I placed my findings before the Minister, Dewan Bahadur Samarth, who agreed that the Kodinar organisation should be scrapped and the manager dismissed. I suggested that an agricultural graduate of 10-15 years' standing should be placed in charge of the Union and that his salary (Rs. 150 p.m.) should be paid by the Baroda Government at least for the first five years. This was rather too much to start with but the Minister was a great enthusiast for co-operation as he himself had started as early as 1890 a co-operative store and an urban co-operative bank in the Baroda City and had seen the work of Sir Horace

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etc. The mortgages are held by private money-lenders who are extremely unpopular. The revenue of the State is $4,000,000 which is entirely absorbed by peasant expenses. The State has no debt, has never tried to borrow any money, probably, could not obtain credit. The sole legislative authority is the Monarch who can make or amend any law.

It is desired to establish a State Bank to take the place of the private moneylenders and to advance money on the security of land at 5 per cent. It is also desired that funds so advanced should be applied directly to the purchase of fertilizers, farm implements, etc., and not spent unproductively. It is also desired to suddenly abolish all the private moneylenders, and out of the interest which is now paid to them, secure an annual amount of $500,000 with which to begin the operations of the new bank.

Suggest a plan whereby (1) the private moneylenders can be abolished; (2) $500,000 a year can be secured for the state bank ; (3) loans can be made on such terms as will make it impossible for their proceeds to be spent unproductively ; (4) it will be impossible for the land-owners to pledge any of their assets to any other lender than the State Bank.

Your plan must confirm at all points to the laws of India regarding taxation, mortgages, etc., which are generally similar to the laws of the United States on these subjects.

Problem II

In putting the refunding plan into effect, by a prohibition tax on mortgages, referred to in the accompanying plan, the following difficulty is encountered. The private bankers or moneylenders surrender and cancel their mortgages, taking in return a form of judgment note which can be called at any time, and which is not recorded. If the borrower after giving this note should attempt to place a mortgage on his property in favour of the State Bank, he will be immediately sold out by the lender who is in close touch with his affairs. The difficulty is increased by a system of imprisonment for debt, which is considered a serious disgrace.

Keeping in mind that these judgment notes are new contracts, that the law making power of the State is unrestricted except as to *expost facto* laws or laws taking property without due process of law, suggest a plan whereby the evasion of the mortgage tax proposed can be prevented.

Problem III—British Bank of Assam

The Bank of Assam, referred to in previous problems, desires to employ all of its funds in loans within the State. There is no large amount of manufacturing or commerce so that the demand for loans from these sources is slight. In order to lend to the farmers, most of whom have only small holdings, with safety, it is proposed to organise credit associations, whose aggregate property shall not be less than $30,000 and to make all loans directly to the association, the proceeds to be spent under the direction of the association and the members to be jointly and severally responsible for its debts. It is desired to fix the rate of interest permanently at 6 per cent. for 6 months' loans. The head men of the various villages can be readily instructed in the checking system.

The loans are to be made for the purchase of farm implements, fertilizers, fencing, and farm animals, practically all of which will be bought through Singapore. The exports of Assam are cotton, grain, tobacco and oil seed, which are sold through Singapore.

Suggest a plan of financing the transactions passing through the National Bank of Assam so that the Bank will not be called upon to furnish cash for its loans and its paid-in capital need only be small, and so that the banks will not be called upon to furnish cash in large amounts to its borrowers.

Plunkett in Ireland. I requested him to permit me to make this experiment and he readily gave the necessary sanction. A graduate from the Agricultural Department coming from Kathiawar and a Kunbi by caste was appointed and the old clerk was dismissed. Soon after his appointment, I went with him to Kodinar and visited all the societies and tried to establish contact with the villagers. It was an uphill task. They doubted our *bona fides*. In the beginning we could not meet the members, as they would run away no sooner we entered the village. They were afraid that we had gone there to recover oustanding dues and that we would use the same old harsh measures. It took us nearly three years before we could win the confidence of the people.

When I took up the Kodinar Taluka under my direct care and started organising societies there was a threat from moneylenders that they would go to court and file suits for the recovery of old debts. It was a real threat and some of them were prepared to take action. I called some of the moneylenders and explained to them that the Government was taking steps to help these poor people and in course of time their debts would be liquidated on an equitable basis, as we wanted the men to pay their legitimate commitments. If in spite of that they (the creditors) went to court, I said, I would defend the debtors, would ask for accounts under the special legislation enacted for the protection of backward tribes and take decrees for the amounts so settled and pray for long instalments (ten years or more) on the ground that the men were trying to help themselves, and that they would punctually pay the instalments. I pointed out that under the circumstances no court would refuse such a reasonable request. This explanation had a very salutary effect and not a single suit was filed. In a few years during which I was in charge of the movement, nearly 70 to 80 per cent. of the debts were cleared from the profits of agriculture. I did not believe in liquidating prior debts to start with.

The societies in the taluka were started on a "multi-purpose" basis; we took the whole man and tried to help him out in every possible way. I visited the area every year and spent about 20 days inspecting all the societies in the villages. I can claim to know all the leaders and a good many of the other members personally I spent evenings running into late nights talking to them on every possible subject.—their social life, religious customs, administrative difficulties besides the technique of their farming. Collective sales and purchases on indent system were arranged and sugarcane cultivation which had gone down to one-fourth on account of fuel difficulties was practically restored by means of improved furnaces, boiling pans and improved crushers. An implement store was opened and improved seeds and manures were supplied. The primary societies were compelled to maintain their primary accounts themselves, the secondary ones being written up by the Union's clerks. The primary books were well maintained and men took pride in them, even though they indicated many scratches and patches of ink. In course of time the smallest society of the most backward type of people of the Khants (a class of untouchables) was able to get a few hundred rupees in deposits. We worked according to a programme based upon the capacities of the people to undertake it and slowly led them on to more complicated duties. Each society and the Union were given lines of development which were examined at the end of the year in the light of experience and modified accordingly. The Union was managed by the Directors appointed from the societies. Half of the Directors of the Banking Union were practically illiterate and some of them would not have worked well if they were not properly looked after, but they managed well and made their Bank a first class co-operative institution. The Union was able to get all the funds they wanted from local deposits and in order to help them to meet sudden withdrawals a cash credit was granted by the Baroda Government to be drawn from the Taluka Treasury at Kodinar. The main idea of the programme—"better finance"—was fairly well organised and a good start made with better farming and better living. The Banking Union still exists and is prosperous, with a share capital of Rs. 22,470, Rs. 10,000 in deposits and a reserve fund of Rs. 20,576. It has a building of its own costing nearly Rs. 10,000. In 1942-43, it assisted the sale societies of seed cotton, *bajri*, groundnut and other crops in marketing their produce worth Rs. 55 thousand. Besides, the Union arranged to secure artificial manure, better seeds and iron ploughs for its affiliated societies.

The primary societies are also working well, though there is a slight setback in the system of management. If the same kind of supervision and guidance were

available in later years they might have shown marvellous results, and the societies and members might have acquired prosperity which would not have been easily affected during the depression in the thirties. There were many items on the programme for better living that could not be undertaken. During my visits to the taluka I used to meet their caste and religious heads to evoke their sympathies in our work. By sympathetic guidance it was possible to modify costly caste customs and ceremonials. But usually the co-operators take a very narrow view of their duties and therefore they are able to exercise a very limited influence over the life of the members.

A little before I handed over charge as Reigstrar in 1919 I visited the taluka. At each visit I usually called a general meeting of the Union when most of the members of the primary societies were invited. There was a striking contrast between what I had seen in 1912—a famine year—and in 1919. In 1912 the people were indifferent, in tatters, ill-washed and famished. It was said of these Kardias that they would change their clothes when they were torn and would take a bath when the rain washed them. In about seven years' time these very men were transformed into well-fed, well-clad and debt-free cultivators with an entirely different outlook on life, self-reliant, mostly rescued from their old vice of drink and some of the filthy habits. It is now nearly 25 years, and the Union and the societies, in spite of the vicissitudes of life, are carrying on fairly well. In 1939, the Chairman of the Valadar Society in Kodinar Taluka wrote to me saying that the membership of the societies had increased from 18 to 86; that the society has now a building of its own worth Rs. 3,000; that the members had not taken any loan from the Bank, but, on the contrary, had deposited with it their surplus funds. The President of the Society is also a member of the Board of Directors of the Union. This is what a multi-purpose society and multi-purpose union bank are capable of achieving, if properly handled and guided.

Personally, I had conceived of a big programme for the taluka. There were immense possibilities for economic development. There were three rivers running through the taluka which could be bunded for storing the monsoon water for rabi crops. (These were later on constructed.) Further more, there is a fine natural harbour which, with small improvements, can be used for at least cosatal traffic. There is also scope for the development of fisheries. It has possibilities for the development of alkali industry for which raw materials are available. I was also in charge of the Department of Industries of the State and had opportunities of putting my ideas into shape. An experimental fishery farm was started and arrangements were made to introduce alkali industry for which a joint stock company was started. Plans for harbour development were prepared but unfortunately the depression that harbour development were prepared but unfortunately the depression that followed the war led to a postponement of these projects. Later on the same plans for alkali industry were utilized, first, by the Dhrangadhra State Shakti Works and later by the Tata Chemicals. If my plans had materialised, the prosperity now enjoyed by Okha could have been that of Kodinar. But it is only a hope deferred; some day the schemes will be revived. India wants all-round efforts at regeneration and not isolated or haphazard ones. I am more than ever convinced that the country needs a very careful survey of its resources and planning for their developments. Personally I have always regretted that I was unable to carry out the full programme for the societies.

After some experience of the Kodinar Union I tried to convert the other banks on the same basis, but it was a difficult task. The lawyers and the business men who were directors and whom I had brought in to help us in the initial stages opposed the admission of the representatives of the societies on the Board and even when they were admitted, their advice and experience were not fully utilised. They took a sort of bureaucratic view of their position. These vested interests in Co-operative Banks are responsible for the narrow outlook of the movement. They begin and end with credit.

Like true democracy, the Co-operative movement should be the people's movement, organised by them and managed by them. It should be guided and inspired with this main objective and I have every faith and conviction that this is the right course. Under our conditions, each society and every man in it is a problem and the movement has to take care of them, to rehabilitate them on a full economic basis. There is no limit to human development. Only we have to apply ourselves to the problems with patience, sympathy and understanding.

EPILOGUE

Now, as we come to the end of our task, the question that remains uppermost in our minds is : What is the future of Indian agriculture ? And how best can we proceed ?

We have given the facts. We have traced the progress of official policies and the lines along which non-official agencies have been trying to tackle the vast problem of bringing within the reach of India's rural masses ascertain minimum standard of comfort and decency. The inadequacy of what has been done is obvious and needs no reiteration. We have, finally, indicated the major lines of reform and reconstruction, taking good care to emphasize the fact that nothing less than all-round planning embracing all aspects of life and taking in all strata of population can help us to reach the desired goal. It is not intended now to catalogue over again the various concrete suggestions we have made in the course of this work, but it would be useful perhaps to stress the point that the problem of the economic betterment of India's millions is not only colossal in magnitude but is almost baffling in complexity, so that its solution will demand a vast, continual and many-sided effort in which all parties—the Government, including the Government of India, the Provincial Governments and the Indian States, the non-official bodies and organisations as well as the public at large, will have to co-operate.

Ours is not a new country to be freshly settled. Nor are we a wild and primitive people to be trained up and harnessed. There is a tradition of centuries to be considered ; there are layers upon layers in our economic and social system which have to be dealt with with due regard to the right requirements and possibilities of each. There are regional variations, there are political diversities, and there are diversities of culture and educational attainment also. These cannot be ignored. We must work out our policies with due regard to all these, bearing in mind that while we seek to raise the general standard of life, we must also lay special stress on the development of undeveloped areas and of poorer and therefore more backward sections of the people. The time has come when all sections and classes of the population must be taken into the scheme, so that while we build the edifice of economic prosperity, we also see that there is not a slave buried alive beneath the foundations. Hitherto, only those who have received modern education or have seen some prosperity, as a result of the new economic forces have been touched by modern ideas

and ideals ; the majority has been left untouched. It is surely no accident that in the cities which are obviously more prosperous than the rest of the country, old customs and prejudices have been dying out, whereas in the rural areas, poverty, ignorance and apathy are all found together. There is probably a great deal in this connection that we can learn from the example of the U.S.S.R. which also was faced with the problem of winning over different strata and classes of people, even different ethnic groups and nationalities, to the New Planned Order. May we not hope that as in that country, so in ours, economic prosperity based on fuller employment and the spread of education and social services down to the lowest and the least may prove a powerful solvent of the differences of caste, creed and intellectual attainments, which have so far seemed to obstinate and baffling ?

It cannot be said that we do not know what is wanted in order to place agriculture on a sound footing, but the tragedy is that whatever the solution suggested, we are told that it is impracticable. Either it involves too radical an alteration of the institutional framework of our rural life, or it presupposes very large funds, or, perhaps—so we are told—the problem is bound up with some other problem, which, in turn, is beyond human cure or treatment. And so, the vicious circle tends to be perpetuated, and we know with what dire consequences. There are people like Thompson and Garratt, who believe that the problem has remained unsolved and is insoluble, for they feel the Government machinery as it is organised to-day is simply incapable of dealing with it on any significant scale. It is also significant that a person like Dr. Ganguli, who has been a consistent worker in the cause of agricultural reform and rural uplift in India has come, no doubt reluctantly, to the conclusion that India's economic problem cannot be solved unless and until India has a National Government of her own. There is a touch of pathos about the words he uses to convey his new conviction, or shall we call it conversion :—

" I must confess to have written this book from a viewpoint somewhat different from that which I held in the past. As a student of agricultural research, I came to believe that India's economic life could be improved by the application of science to the problem of livelihood. What was necessary was an enlightened policy of reforms in the economic and social structures, and I was inclined to be content, provided the execution of the organized plan were effected by the existing administrative machinery.

" But now, after spending nearly a decade in Europe, and having devoted much time to the study of various plans for agricultural and rural development, I am convinced that the basic problems of a nation cannot be solved without the essential pre-requisite of political rights and freedom. It is the lack of this freedom, inherent in the conception of popular sovereignty, that creates the naive and complacent type of nationalism. Only when the assertion of national independence against a foreign rule or against a system of government incompatible with the democratic ideal becomes effective does the medley of contradictions in which the reformist ideas are entangled disappear."

The point need not be argued at any great length. The present administration in India has reached the limit of its usefulness. When 43 years after the assumption by the Crown of direct responsibility for the Government of India, there was a most devastating famine in 1900, we have it on the authority of Thompson and Garratt that the administration was unprepared and it found itself unable to cope with the famine. Another 43 years—1943, and there occurs another great tragedy of a similar character in Bengal, Bijapur, and South India and, we find it is the same story of unpreparedness and inefficiency over again. That the situation in Calcutta improved after the military was called in to help the civil administration only testifies to the failure of the latter to comprehend the situation in time and make preparations well in advance for any contingency whatever.

As we have argued in the earlier chapters, the bureaucratic machinery in India works slowly ; there is corruption, red tape and even lack of goodwill among the officials, who seem to specialise in finding good reasons to put off all desirable reforms and to shelve all suggestions for improvement. This negativism has had fatal results. The officials in India have become a caste by themselves—touch-me-nots—apart and isolated from the mass of the people, a fact which reminds us of that famous phrase of Milton's : " The hungry sheep look up and are not fed."

But the administrative machinery bears about it the impress of the kind of Government at the top. Let the character of the Government change and then will come about slowly but unmistakably a change in the spirit of the services. The brief experience of the popular ministries in the provinces has been an eye-opener. They had the courage to launch upon ambitious schemes, such as the reform of the land system, which the present Government could not think of touching for fear of displeasing the vested interests created by itself.

The same is true of many desirable social reforms. It is clear, then, that the establishment of a truly National Government is the very *sine qua non* of any substantial scheme of economic reconstruction, including rural reconstruction and development.

This, however, will not be the end, but rather the beginning of our difficulties. So far our lot has been the rather light, though not pleasant, one of criticising those in authority. Hereafter, we shall need constructive work and constructive thinking. Truly, indeed, has it been said that the battle of freedom is never won, once and for all ; we have to win it afresh, like love, every day of our lives. We shall need to muster all our powers of organisation and planning and all will have to make sacrifices. The biggest problem of all will perhaps be one of finding the right ideas and the right men to work them, the right technical personnel and the right administrative personnel, for planning implies a manifold increase in the demand for experts in all spheres of collective life. Difficult though all these things are, they are not beyond us, for while we as a people may not have the tenacity of the English, the enthusiasm of the Yanks, the shrewdness of the Japs, and the thoroughness of the Germans, we yet have an honesty of purpose and a determination, born of long suffering, to see that we shall lift ourselves from our present helpless and hapless plight, maybe through trial and error, maybe, by stages, some quick, some slow, but lift ourselves we certainly will.

All this does not, however, mean that the present Government of India can shirk their responsibility. They must take action now to prepare the country for the great steps forward which must be taken after this war for democracy and freedom is won.

In the very reports of the numerous Commissions and Committees appointed by them in the course of the last twenty-five years there are any number of recommendations and suggestions which have not as yet been adopted. Let a review be attempted to find out which of these recommendations have been implemented and with what results and which of these can yet be tried with legitimate hope of success. If one goes through the Indian Taxation Enquiry Committee's Report, or the Report of the Royal Commission on Agriculture, or, again, the Report of Sir Arthur Salter, who was called in definitely to draw up a scheme for economic planning for India,—to mention only a few of the Reports thus before us—one will have ample guidance as to the future programme to be taken up. The need is for action, quick, determined action, and action on a large enough scale with no mental reservations of any sort.

To solve our vast and complicated problems, we shall need an elaborate aministrative machinery. We shall need scientific experts in all branches : we shall have to know our facts thoroughly, and, we shall be called upon to keep constant watch over our plans and their working, so that there is no avoidable incompetence, suffering or waste anywhere. At present, it is the war which preoccupies all Government's attention. Schemes of post-war development are being formulated and discussed, but the progress is, if anything, slow and uncertain. In the post-war period, the immediate problems of demobilisation and shift-over to peace-time tasks will be all-absorbing. We may be faced with a slump in prices and a decline in employment, and it may take all our energies even to keep afloat in this storm. Unless, therefore, plans are made from now and kept quite ready, the Government of India may again find, when peace comes, that what they do is, as hitherto, too little and too late. Along what lines this has to be done we have indicated in the course of this study, though, of course, we have no desire to be dogmatic that these are the only correct lines.

To conclude, then, there are not merely vast natural potentialities in this country ; there is also plenty of talent and capacity for hard work and for sacrifice. So far all this has run to waste. If Indians resources, natural and human, are marshalled and directed along right channels there is every reason to be hopeful about the question we have posed at the commencement of this epilogue. If that does not happen . . . well . . . we had better not visualise that contingency. The Indian rural problem is a challenge to the rulers and to the ruled, and it is a challenge that can be met only when there is a new awakening and a new readiness to work and sacrifice on the part of all concerned. Granted this basic requirement, all other considerations, funds, technical equipment, expert knowledge, are minor ; they will come. Others have done it before us. We in India also can, and we must. And, probably, as we proceed, we shall continually discover new springs of action, new avenues to success, new ways of organisation and achievement, so that the solution of the problem which looks so vast and intractable to-day may, when we work at it, prove to be not so superhuman a task after all, and the joy of something done and done well may give our nation the courage and enthusiasm to take on more formidable tasks, not for power and wealth alone, but for culture and light, which is our true heritage. Man's spirit—what can it not triumph over ?

APPENDIX

INDIAN SOCIETY OF AGRICULTURAL ECONOMICS

ORIGIN, AIMS AND OBJECTS

THE idea of organising an Indian Agricultural Economics Society was first mooted by Mr. L. K. Elmhirst, President of the International Conference of Agricultural Economists, when he was in India during the winter of 1938-39. Dr. T. G. Shirname, the then Marketing Officer, Delhi, invited a number of persons interested in agricultural economics to meet Mr. Elmhirst and to discuss the possibilities of organising such a society. A meeting was held at Delhi on the 27th January 1939, under the chairmanship of Sir Bryce Burt, and it was decided to form the Indian Society of Agricultural Economics. Membership of the Society is open to all persons interested in the economic and social conditions of agricultural and rural life. Institutions, such as Universities, Government Departments and other scientific and research bodies can also become members and are entitled to send their representatives to the Conferences and meetings of the Society.

CONSTITUTION

1. The name of the Society shall be "The Indian Society of Agricultural Economics."

2. The objects of the Society shall be to promote the investigation, study and improvements of the economic and social conditions of agriculture and rural life.

These objects shall be pursued by :—

(*a*) holding periodical Conferences for the discussion of problems ;

(*b*) publishing papers or summaries of papers, either separately or collectively, or in a periodical which may be issued under the auspices of the Society ;

(*c*) co-operating with other institutions having similar objects, such as the International Conference of Agricultural Economists and the Indian Economic Association ;

(*d*) any other means which the Society may decide.

3. The Society shall consist of (*a*) Members, (*b*) Honorary Members, and (*c*) Member-Institutions, who are interested in the economic and social conditions of agriculture and rural life.

Candidates for membership shall be nominated by any two members of the Society and admitted to membership on being approved by the Executive Committee.

Candidates for Honorary Membership shall be nominated by the Executive Committee and elected by a majority of members present and voting at a General Meeting of the Society.

Institutions wishing to become members shall apply to the Executive Committee and will be admitted to membership on its approval.

Members and Member-Institutions shall pay to the Society an annual subscription of Rs. 12. The composition of subscription for Life-Membership shall be Rs. 250.

Member-Institutions shall be entitled to send only one representative to the Conferences and meetings and shall not be entitled to the composition of subscription for Life Membership.

4. Except as otherwise provided in the Constitution, the business of the Society shall be conducted by the Executive Committee.

5. The Office-bearers of the Society shall be a President, three Vice-Presidents, an Honorary Secretary-Treasurer and an Honorary Joint-Secretary, if appointed.

The Executive Committee of the Society shall consist of :—

(1) the President,

(2) three Vice-Presidents,

(3) an Honorary Secretary-Treasurer,

(4) an Honorary Joint Secretary (if appointed), and

(5) nine Members.

The President and in his absence one of the Vice-Presidents present, shall preside at the Executive Committee meetings.

The Office-bearers and the Executive Committee shall hold office till their successors are elected.

The Executive Committee shall fill any vacancies in the Committee occurring during their period of office.

6. The General Meetings of the Society shall ordinarily be held once a year. The time and place of such General Meetings shall be fixed by the Executive Committee and not less than twenty-eight days' notice of these General Meetings shall be given to all members, Honorary Members and Member-Institutions.

A Special General Meeting may be convened by the Executive Committee at any time and shall also be convened on the requisition of not less than twenty-five members. Fourteen days' notice of such Special General Meeting shall be given.

The following business shall be transacted at the General Meetings :—

(1) Consideration of the annual report and audited accounts.

(2) Election of office-bearers and the Executive Committee.

(3) Election of Honorary Members if any.

(4) Appointment of auditors.

(5) Consideration of any proposed amendments to the Constitution, subject to clause 7.

(6) Other relevant business.

7. Any amendments intended to effect any alteration in the Constitution of the Society, shall be submitted in the form of a written notice of motion, to be circulated to Members, Honorary Members and Member-Institutions with the notice of a General Meeting and shall be considered at such General Meeting. Amendments shall be carried with two-thirds majority of the members present at such General Meeting.

Recently the programme of the Society has been expanded so as to make the Society a more active body. The programme is as follows :—

PROGRAMME

A. *Organisation*

(*i*) To increase membership and collect donations from the public and the Governments and the Indian States for the extended programme of work.

(*ii*) To have an office in Bombay with the necessary staff and a library.

(*iii*) To appoint special committees for—

(*a*) The editorial work of the Society's publications.

(*b*) The research programme of the Society.

(*c*) Similar committees to be appointed for the provincial and regional centres.

B. *Clearing House of information on Agricultural Economics and Allied Subjects.*

I. Indian :

(*a*) (*i*) To compile a list of universities and colleges that provide special teaching in agricultural economics and the nature of the studies provided.

(*ii*) To compile a list of agricultural colleges that have courses in agricultural economics.

To collect information from them regarding special investigations made by them or researches subsidised by them.

(*iii*) To collect information regarding the research institutions that specialise in agricultural economics, like the Punjab and Bengal Boards of Economic Inquiry and the Gokhale Institute, Poona, and to find out the nature of the work done by them.

(*iv*) To prepare a bibliography on rural life publication in India including reports of Commissions, special inquiries, etc.

(*v*) To prepare a list of magazines and periodicals on the subject issued in India.

(*b*) To collect information regarding the rural reconstruction activities of Governments in India under different heads :—

(*i*) Technical improvements.
(*ii*) Sanitation and social relief.
(*iii*) Education.
(*iv*) Local self-government.
(*v*) Organisation of agricultural finance, sale and purchase, marketing, co-operation, etc.
(*vi*) Cattle and milk problem.
(*vii*) Propaganda.
(*viii*) Subsidiary industries.
(*ix*) Rural life centres.
(*x*) Legislation passed by various Governments to help agriculturists—debt legislation, tenancy regulation, etc., control of money-lender, land alienation, rent restriction and their effects.

II. Foreign:

To get into touch with important institutions and societies or associations working on lines similar to ours. To establish contact, exchange publications and to prepare a bibliography of their publications and also of books on the subject.

C. *Publications*

(*a*) To prepare special monographs giving out this information for the use of the public and other workers on similar lines.

(*b*) To appoint provincial or regional committees or correspondents to study local problems.

(*c*) To prepare provincial or regional monographs on rural life problems of the localities on the lines of the monographs prepared by continental governments at the instance of the League of Nations.

We may ask Provincial Governments to prepare these, or, if they do not agree, we may ask non-officials to compile them with the assistance of Government officers.

(*d*) To prepare an annual review on the progress in agricultural economics in India with the assistance of provincial and regional committees or correspondents.

(*e*) To publish a bi-monthly or a quarterly study on any selected topic on the lines of the Annals of the American Academy or the Agricultural Association of England. It should be divided into three sections :—

(*i*) Topical studies contributed by specialists.

(*ii*) Book reviews and reviews of periodicals.

(*iii*) Activities of Universities and research bodies. New Publications. Information from foreign countries on the subjects in which the Society is interested.

D. *Studies and Investigations*

(*a*) Special studies or investigations :—

(*i*) These may include Land problems in India, Debt legislation in India, Fragmentation of holdings, Influence of social life on economic problems, Health

and Diet, Housing problems, Land Tenures, Rents, etc., Administration and its influence on the development of rural life.

(*ii*) Prices and production, Stabilization of prices, Currency and prices, Agricultural production and Government tariff policy, Communications, Industrial developments and rural life.

Local studies will be carried out by local agencies and the head office will confine its activities to studies and investigations that could be done from Government publications and reports.

We may engage special staff to carry out some of these studies or subsidize others to do it.

(*b*) To train workers for these studies.

E. *Conferences*

Besides the annual conference, we may have every third year a rural life conference with the main object of reviewing the progress of the various schemes adumbrated.

OFFICE-BEARERS

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Sir Manilal B. Nanavati.

Vice-Presidents

1. Prof. D. R. Gadgil.
2. Dr. T. G. Shirname.
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" " " 1942-43, 10.
International Conference of Agricultural Economists (1938), 5th Conference, Proceedings, of, 293.
International Labour Office :—
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" " "Food Control in Great Britain", 47.
" " "Recreation in Rural Areas", 376.
Irrigation Commission, 1901, Report of, 26.
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